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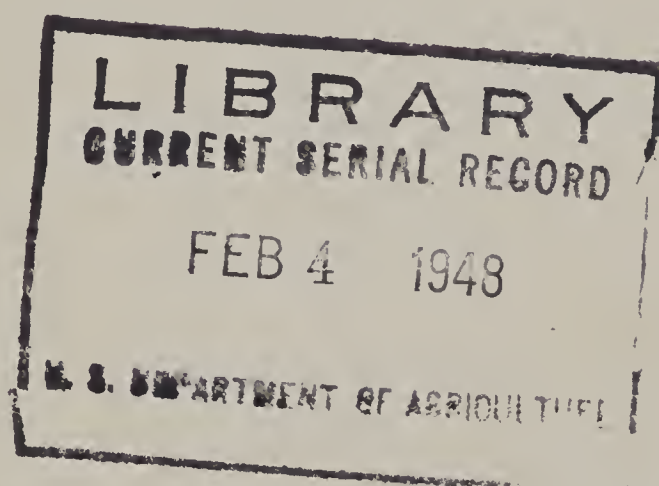
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**REPORT OF COOPERATIVE  
EXTENSION WORK IN  
AGRICULTURE AND  
HOME ECONOMICS  
1947**

**BETTER RURAL  
LIVING**



**U. S. DEPARTMENT OF AGRICULTURE**



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REPORT OF COOPERATIVE EXTENSION WORK IN  
AGRICULTURE AND HOME ECONOMICS, 1947

Better Rural Living

UNITED STATES DEPARTMENT OF AGRICULTURE,  
EXTENSION SERVICE,  
Washington, D. C., October 1, 1947.

HON. CLINTON P. ANDERSON,  
*Secretary of Agriculture.*

DEAR MR. ANDERSON: I submit herewith the Annual Report of the Extension Service for the fiscal year ended June 30, 1947. Totals for activities and results are for the calendar year 1946.

Yours sincerely,

M. L. WILSON, *Director.*

WHAT FARM PEOPLE ARE SEEKING

With eyes fixed on the future, America's farm families are concentrating their efforts on better living.

Eyes are fixed on the future because the people of rural America sense deeply that their future, as well as the future of others in our Nation and the world, rests with their contribution to the lives of millions of people.

Better rural living is the keystone in the structure of our national well-being.

What is better rural living? It's to improve rural health. \* \* \* It's to plan the farm and home together as a unit. \* \* \* It's to improve opportunities for recreation, education, spiritual and cultural growth. \* \* \* It's to plan to use the soil for purposes for which it is best adapted. \* \* \* It's to improve the kitchen, construct a modern bathroom. \* \* \* It's to add more labor-saving equipment. \* \* \* It's to provide an adequate diet. \* \* \* It's farmstead beautification. \* \* \* It's to provide better training for children and guidance for youth. \* \* \* It's to produce efficiently and abundantly to earn all these just rewards.

These and many more things make up better rural living.

Why is better rural living so important when only 20 percent of our people actually live on farms?

It's because the raw material for America's food, the fiber for America's clothing, and the lumber for America's houses and factories originate in rural America.

It's because rural America produces a substantial surplus of youth which goes to make up the big deficit in birth rate in urban centers. Without rural America our Nation's population would not gain, but probably would lose ground.

It's because rural people realize that better home living, better educational, better recreational, better health, and better religious facilities mold better citizens.

It's because farming, even today, is the Nation's No. 1 private business, supporting 28 million people and producing 25 billion dollars in annual cash income from a plant valued at 90 billion dollars.

### EXTENSION PROGRAM CONTRIBUTES

For more than a third of a century the cooperative Extension Service has worked toward better rural living. More production, balanced farming, and improved methods may have been points stressed during emergencies. But always, extension workers have had the desire and the aim to make life on the farm more livable for the present generation and more attractive to the youth of the next era.

Through good years, through bad; through droughts and dust storms and floods; through war and peace; through curtailed and maximum production rural America has looked to this down-to-earth teaching arm of our Government for guidance. Throughout the year, nearly 4,500,000 farm families and 2,100,000 other families sought and were served by the 11,000 paid professional technicians of the cooperative Extension Service.

Long before the enactment by our Congress in 1914 of the Cooperative Extension Act, rural people were seeking a better way of life. Many States had extension programs, and leaders dreamed of better life on the farm for their children and their children's children.

The cooperative Extension Service resulted from demands of the people. Rural America wanted an educational program in which the local community, the county, the State, and the Federal Government pooled their resources. Not financial resources alone, but sometimes more important resources—resources of knowledge, community leadership, supervision, and findings of agricultural and home-economics research.

Today, with Extension a third of a century old, the third and even fourth generations are profiting from the foresight of the originators of the program.

### WHY BETTER RURAL LIVING PROGRESSED LITTLE

The cooperative Extension program has done much to aid farm families in better rural living in the past third of a century. Certain hardships have prevented farm people from making greater achievement.

Through the 1920's many farmers were paying for high-priced land, bought in the boom years during and immediately after the First World War. All they could gather together went toward retiring a huge farm debt. Little was left for improving and modernizing.

From 1930 to 1938 was a period of low prices, droughts, depression, and curtailed production. Farm families did well to hold on to what they had gained and many fell behind. Improving home living conditions made little advancement because of economic conditions.

Rural America went from a "bust to boom" in the late thirties. Quick was the recovery from drought, dust storms, and depression prices. The war in Europe was at hand. America became the "arsenal of democracy" and the "bread basket of the world." Production



was the demand and the yardstick: More wheat. More corn. More fats. More meat. More food. More fiber.

Regular farm labor nearly vanished. Sons went to war factories and later to the armed forces. There was no material and no time to build, to remodel, or to improve the farm home. Farm machinery wore out and new machinery was not in sight. New furnishings, appliances, and fixtures evaporated from stores. Community recreation got little or no attention. Many teachers left rural schools, and older students found big pay beckoning.

For 8 years the annual call went out for more food, more grain, more production. Tired and aching backs and creaking and worn-out machinery continued to produce more and more in one crisis after another. The women and children pitched in. There was a job to do. Some foreign and prisoner labor was provided. City people helped, too. Farmers were told "Food will win the war." The United States turned the tide. Far fewer farm people produced nearly a third more than during a similar period in World War I.

When the shooting was over in 1945 there was only a breathing spell. The war was won. Then came another crisis. Europe and Asia were starving. "Food will write the peace"—that was the new battle cry.

So in 1946, with some sons home from the battlefields, our farmers went all-out again. Through Extension's farm labor program, 21½ million nonfarm workers were recruited. When harvesttime rolled around in late 1946, the answer was well written. The greatest wheat and corn crops in history were recorded. Other production records were surpassed, equaled, or neared. Rural America helped fill the aching stomachs of starving war-torn nations.

#### FARMERS THINK OF THE FUTURE

Though production in 1947 was still important, this country's farmers settled down to more thinking about the future. Farm earnings had been higher and farmers had some savings. Real, practical living on the farm must be given more thought.

From the grass roots came demands in the late months of 1946 and early 1947 for more extension programs to bring about that ultimate goal of better rural living.

County extension workers in the 48 States, Alaska, Hawaii, and Puerto Rico, continued to get requests for information. But the trend had changed. Rural America wanted Extension's aid in land-use planning, farm and home planning, home remodeling, soil-erosion control, farm mechanization. More requests came in for help toward improving facilities for rural education, recreation, worship, and health. Farm women wanted to know more about better diets for their families, and about freezing foods for home and community lockers. Better marketing of farm products, the economic outlook for agriculture, and more information about economic problems and public policy were on the list of things farm people wanted help with.

Veterans, home from the battle front, wanted advice on farming. Their new wives, some from other lands, sought homemaking help, too.

Farm families, encouraged by youth, started thinking more about rural fire protection and safety, farmstead beautification, rural electrification, and happier family relations.

Yes, rural America had decided it was time to devote more thought and money to making life down on the farm more interesting, more pleasant, and more attractive.

### EXTENSION PROGRAM SERVES MANY

Though not adequate to meet these increasing demands, Extension's staff of 11,000 technically trained workers devoted many overtime hours to meeting numerous demands for new or expanded programs.

County extension workers alone made nearly 3½ million farm and farm-home visits during the year. People seeking information and help made more than 9 million personal visits to the county extension offices. Nearly 7½ million telephone calls were answered. Some 52 million farmers, farm women, and rural youth attended county extension meetings. As evidence of the high interest in new information, attendance at meetings was 14 percent higher than during the year previous.

Of Extension's 11,000 workers, more than 75 percent, or 8,500, were county workers. They dealt directly with rural United States in the 48 States, Alaska, Hawaii, and Puerto Rico. They included 4,407 county agricultural agents and assistants, working with the farmers and supervising extension work within their respective counties. There were 2,808 home demonstration agents and assistants who worked with farm and other women interested in bettering home practices. County agents, assistant agents, and home demonstration agents all spent considerable time in 4-H Club work. Working exclusively with rural young people were 553 4-H Club agents. There were also more than 700 Negro county extension workers.

Added to local county staffs are State and Federal forces. Twenty-three percent of the personnel is on State staffs in land-grant colleges. They are the supervisors, specialists in fields of agriculture and home economics, and others who help to train leaders.

Smallest in number in Extension's family of 11,000 are the 88 men and women who make up Federal Extension's technical staff of the United States Department of Agriculture. They make up about 1 percent of the total for the Nation.

In the Federal office are the administrative staff and the technical specialists housed with other bureaus in the Department, who deal with specific farm and homemaking problems. These specialists serve as liaison officers between the bureaus and the State specialists in the same field. They carry to these 1,827 State specialists the latest technical information on research and practical development in their fields.

In turn, these State specialists work with the county extension agents, who take directly to the people the latest information made available through Federal and State research.

What did all this cost? The total expenditure of county, State, and Federal funds for the extension program in 1946-47 was not quite 54 million dollars. Slightly more than half of the money came from Federal sources—appropriated by the Congress. The remaining funds came from State, county, and local organizations.



## COUNTIES SPENT 69 PERCENT

Where was the money spent? Sixty-nine cents out of every dollar was spent for the extension program within the 3,097 counties in the United States cooperating with the program.

Twenty-nine cents of each dollar went to finance State staffs, travel, publication of bulletins and folders, and preparation of teaching tools used by county workers in carrying on their educational program.

Only 2 cents out of every extension dollar was spent by the Federal Extension Service. In addition to salaries and travel this included costs of some education and information materials used by State and county workers.

The cooperative extension program is primarily educational. It is a practical, out-of-school kind of teaching. It applies science to real situations on a learn-to-do-by-doing basis. It is the teaching of farming and homemaking to the men, the women, and the youth of our farms and villages.

This program is true democracy—farm people in partnership with their county, State, and Federal Governments. Its policies, its financial support, its program execution, its leadership are completely cooperative.

## PROGRAM ADMINISTERED COOPERATIVELY

This cooperative extension program travels on a two-lane highway. On one side, traveling from the people through the county and the State and finally to the United States Department of Agriculture, are requests for solutions of problems and for guides by which people can help to solve those problems. On the other side of the highway are the facts, information, and guidance flowing from the Federal agency and the land-grant colleges to the people through the county extension staffs.

Administration of the extension program in the States is handled cooperatively by the Department of Agriculture and the Nation's 68 land-grant colleges, including 17 for Negroes. The colleges and the Department work hand-in-hand.

The land-grant colleges carry on their education and research through three channels: (1) The State experiment stations, closely coordinated with the Agricultural Research Administration of the Department of Agriculture, do scientific work to find new crops, new methods, and improved ways of farming and homemaking. (2) Resident teaching staffs in land-grant colleges train young people for agricultural and homemaking work, including personnel to go into the field as extension and vocational teachers. (3) The Extension Service carries its teaching to the farms and homes of rural America.

These extension programs in all the States expand the college campuses to every nook and corner of our Nation. Extension teaching and cooperation are available to all—not compulsory, but voluntary. Its fund of information is there for the asking, whether it be for a tenant farmer or a rancher.

## WHO ARE EXTENSION'S WORKERS?

Who are Extension's technical farm and homemaking workers? What is their background, their training, their experience?

Although the turn-over of personnel has been great during recent



years, 40 percent of all county extension workers have served farm families 10 years or more. Most of them have a background of good college education and practical farm or home economics training.

During the war years, 1,564 of them entered the armed services. Thirty sacrificed their lives.

A total of 484 home demonstration agents and 440 county agricultural agents or assistants were lost to the Extension Service during the year. Though some retired and some women workers were married or took over full-time homemaking duties, much of this large turnover was due to better salary opportunities in other kinds of work.

County staff workers have had an average of 25 percent increase in salary in 3 years. This has helped materially to hold experienced personnel, but the average county agricultural agent during the year was paid \$3,591. The average home demonstration agent earned but \$2,745. Neither amount is comparable with the salaries paid men and women with like education and experience in other fields. Significant is the fact that those agents leaving Extension for better jobs in other agencies or private concerns started at salaries averaging \$1,300 a year more than they were paid to serve farm people.

#### WORKERS IMPROVE KNOWLEDGE

With a personnel increase due to replacements and larger county staffs, preservice and in-service training assumed an even more important place. Training programs for new employees were carried out in more than half the States. Such training is of several types. New agents in the field got special training in the philosophy, background, and methods of Extension. Experienced agents met in workshops and conferences to analyze their jobs. They studied what they had done and what they should do to meet demands of changing rural America. Undergraduate courses in extension organization and methods are now offered in 28 land-grant colleges.

Summer schools in nine of the land-grant colleges during the year attracted many county extension workers who wanted to know more about their job. They were willing to give their own vacation time to learn, that they might better understand and work with farm people.

Conferences were held for State and National leaders to bring them up to date on the latest information. One such meeting was held for clothing and textiles specialists and another for foods and nutrition specialists.

Many land-grant colleges have committees studying changes needed in training requirements for extension workers. The Secretary of Agriculture and the president of the Association of Land-Grant Colleges and Universities recently appointed a joint land-grant college and United States Department of Agriculture committee to study extension policies and programs in view of present-day needs.

Extension workers are thinking more of their job as a profession. Extension work is old enough for some to have made it a lifetime career. These men and women have a passion to serve and give of themselves for the betterment of others, and more of them are needed.

#### BANKHEAD-FLANNAGAN ACT PAVES WAY

Passage of the Bankhead-Flannagan Act in June 1945 paved the way for broadening extension activities. This was especially true in the counties, where new demands for service continue to increase. The



8½-million dollar increase in funds made available under this act for use during the past 2 years permitted the addition of 2,113 new county workers and supervisors.

With these funds, 138 county agents, 763 assistant county agents, and 71 Negro county agents were employed. Assistant county agents helped with youth work in many counties.

For homemaking work, 219 home demonstration agents, 293 assistant agents, and 110 Negro home demonstration agents were added. The total number of agents employed exclusively for 4-H Club work in the counties was 231. Thirty assistant county 4-H Club agents also were employed. More women workers would have been employed if qualified personnel had been available at the salaries that could be offered.

The States matched the Bankhead-Flannagan funds dollar for dollar. Approximately 85 percent of these funds were spent in the counties. Local governments, State legislatures, and land-grant colleges continue to obtain increased funds for extension work. This is an indication that the people within the States are favorable to such appropriations. Some States have provided appropriations in excess of the amount needed to match Federal funds available for extension work.

County workers on the average, spend about 60 percent of their time in the field with farm families and 40 percent handling office matters.

Speaking of the value of the Extension Service, the Secretary of Agriculture has said: "Now in about 3,000 counties, county agricultural agents work with farmers on one hand, and keep in touch with agricultural colleges on the other. When a new and better crop variety is developed, it gets into our fields just as fast as possible. Through this Extension Service system science is translated into everyday farm practice. There is nothing quite like this system in the rest of the world. But we hope there will be. Food and Agriculture Organization will stimulate and aid the establishment of similar systems in other lands."

#### OTHER NATIONS STUDY EXTENSION'S PROGRAM

In line with this trend in thought, many foreign nations during the past year had agricultural leaders in the United States studying the Extension Service. Among them were: Brazil, Chile, Peru, Colombia, Ecuador, Mexico, Haiti, Costa Rica, France, Greece, Sweden, Iran, Palestine, and China. Large groups of trainees from these nations visited different States and Washington, D. C. Smaller groups came from other countries for preliminary studies. Many nations have already patterned an agricultural program of education of rural people after the United States Cooperative Extension Program.

Through their talks and newspaper articles, these visitors have contributed to better understanding by American farm families of the agriculture, living conditions, and customs of people in other countries.

Extension has always cooperated with other agencies. Those groups, Federal, State, or local, with programs of value to rural America, always find a helping hand awaiting them from extension personnel. War boards, State nutrition committees, civilian defense and draft boards found county extension people willing cooperators during the war period.



During the year, Extension cooperated fully with many agencies. County agricultural agents reported the following number of days devoted to working with cooperating agencies: Employment Service, 13,711; Agricultural Adjustment Agency, 32,072; Soil Conservation Service, 39,788; Farm Security Administration, 10,468; Rural Electrification Administration, 9,242; Tennessee Valley Authority, 21,234; Social Security, Public Health, and the Children's Bureau of the Department of Labor, 8,424. In addition, State workers in Extension gave much time cooperating with these Federal agencies.

County fairs, which give rural people an opportunity to show their work, got much attention from county extension personnel. In many counties these workers are the backbone of the fair group, which provides rural people with one of their greatest opportunities for enjoyment and study.

Cooperation with vocational-agriculture and homemaking teaching and training in the schools has long been a part of Extension's program in most localities.

#### MORE PEOPLE VISITED—MORE PLANNING DONE

With the reduction of war emergency activities, county extension workers had more time during the year to devote to the planning of effective county programs. Through rural policy committees or agricultural planning committees—known differently in various States—the personnel was able to help people plan the kind of program they wanted.

The representative people from various parts of the county who make up such a committee are advisers to the county agent and his staff. From them extension workers find out what the general trend of thought is in all sections of the county.

More visits by county extension workers to farms and homes were possible during the year because of the let-up of war activities.

Thousands of cooperators served as voluntary local leaders during 1946-47. A substantial increase was shown in adults assisting in 4-H Club work. County workers also spent a greater part of their time during the year in youth work including 4-H Club programs than during previous years. Reports show 31.4 percent of the county workers' time was spent with youth in 1945 and 34.2 percent on youth work in 1946.

#### 4-H CLUB PROGRAM PROGRESSES

"Working together for a better home and world community"—that was the theme for local, State, and National 4-H Club work during the year. It is one that agrees with the trend of thought for better rural living in the United States. It is also linked closely with the ten 4-H Club guideposts, which have had much to do in shaping the 4-H postwar program.

Although the 4-H Club program was seriously handicapped by the large turn-over in county extension personnel, more than 1,600,000 rural boys and girls were enrolled in 4-H Club work during the year. That is an increase of 52,417 over the year previous, making the total of different young people participating in 4-H Club work since its beginning more than 12¼ million.



## SEVENTY-FIVE PERCENT COMPLETE PROJECTS

More outstanding than numbers is the fact that during the past 7 years, three out of four 4-H Club boys and girls completed projects to the satisfaction of their leaders. The fact that more than 75 percent carry through to successful completion their project plans places the 4-H Club high, if not at the top, among youth organizations of this or any other country.

In line with the theme of better rural living, 4-H Club activities centered around the improvement of the home, the farm, and the community. Discussions at many meetings concerned what could be done by 4-H Club members toward a better world community. Over-all 4-H Club activities did much to prepare tomorrow's citizens physically, mentally, and spiritually. This was done by providing opportunity for voluntary activity in community programs built on the needs and interests of young people and the community.

Passing of the war emergency resulted in increased desire for such 4-H Club activities. Programs were expanded and enriched, quality of work was improved, greater cooperation was noted on the part of parents and friends of club members.

In all, 4-H members raised 716,000 head of livestock for home supply and market. They grew 113,000 acres of gardens and nearly 425,000 acres of food crops. In their poultry work they handled nearly 9 million birds. They prepared and served more than 18 million meals, keeping in mind the dietary needs of their families. They canned, largely from garden surplus, nearly 20 million quarts of food products. They brined 270,000 gallons more of food products. Nearly 12 million pounds of food was dried, cured, stored, or frozen by 4-H Club youth of the United States during the year.

## TWO MILLION GARMENTS MADE

More than 2 million attractive articles of clothing were made by 4-H Club members for themselves or other members of their family. Nearly a half million rooms in rural homes were made more comfortable and satisfying.

In addition, increased interest was apparent in forestry, soil, and wildlife conservation, home beautification and management, fire and accident prevention, tractor maintenance and repair, keeping personal accounts, and in personal-health programs.

Through 4-H Club health programs, physical examinations were provided for nearly 200,000 rural youth. Many followed up by getting proper medical attention to remedy deficiencies. Many more improved their health by checking and regulating their own food and health habits. Parallel with personal-health improvement was 4-H Club interest in improvement of community health conditions and facilities.

The number of county and State 4-H Club camps greatly increased during the year. Attendance likewise was higher. These camps gave rural youth an opportunity to live and work together, exchange ideas, and become more enthused with the principles of good citizenship.

## 4-H CLUBS AID FOREIGN LANDS

Aid to distress in foreign lands during 1946 got much attention from 4-H Club youth. In Jefferson County, W. Va., 4-H Club members collected and sent abroad four carloads of wheat. Similar projects were carried on in many States. Many 4-H Club groups provided



vegetable seeds to send to foreign lands so that hungry people could grow gardens.

Thousands of 4-H Club members sent friendship boxes of food and clothing to other countries. These often resulted in a happy exchange of greetings and letters.

This aid for foreign nations did not end with food and clothing shipments. Army and Navy personnel, familiar with 4-H Club work and what it had done for rural America, saw a need for it in foreign lands. Officers and enlisted men, stationed abroad, wrote to many States for bulletins, folders, and other information about the 4-H program. In it they saw the possibility of raising the standards of foreign people through youth.

Because of the success of the 4-H Club program in providing worthwhile activities for individuals and groups, foreign countries sent youth leaders here to study the program. Many requests have been made by foreign countries for exchange visits of 4-H Club members and leaders with similar groups from those countries, for a better understanding of youth problems.

The addition of more county extension workers under increased appropriations resulted in more time being devoted to 4-H Club programs. County workers gave more than a third of their time to youth work. In addition, the number of volunteer leaders increased. Nearly 200,000 local leaders helped with the program. Of this number were 45,000 older club members who demonstrated their appreciation of the 4-H Club program by lending their experiences and leadership. They served by helping younger members to learn and gain from their experience.

The 4-H Club program is not designed entirely for members' self-improvement. Community improvement has an important part. Through campaigns, 4-H Club members improved public grounds and developed roadside parks, sponsored local fairs, tested and improved water supplies, initiated hot school-lunch programs, made, purchased, or otherwise provided hospital supplies. In one county in the State of Washington, 4-H Club members stamped the farmer's name on all the gates or some other convenient location. In many States throughout the Nation, mail boxes were painted and stenciled through 4-H Club beautification projects.

#### CITIZENSHIP RESPONSIBILITY STRESSED

Citizenship responsibilities were brought to the attention of 4-H Club members reaching voting age. Their obligations to their Nation and their local government and their leadership responsibility were stressed.

Through National 4-H Club Week, National 4-H Achievement Week, and 4-H Club Sunday, the public became aware of the values of 4-H Club work in developing citizens with both ideas and ideals.

During the year an increased number of youth participated in judging contests and nearly half a million gave demonstrations of improved methods of farming or homemaking. More than 400,000 participated in fire- and accident-prevention programs and 138,000 studied wildlife conservation. Soil and water conservation proved interesting to more than 100,000 youth, and 223,000 kept personal accounts to improve spending habits.



What happens to 4-H Club members after they leave the program? In Union County, Oreg., a survey was made to determine an answer. As you drive down the roads in that county, you find one out of every three farms is operated by a former 4-H member. And that percentage is increasing. When a group of these former 4-H Club members—now successful farmers—were brought together they were asked this question:

What were the three most important benefits you got from your experiences in 4-H Club work? The four items most often listed were:

- Working with others to accomplish results.
- Learning the importance of keeping records.
- Accumulating livestock capital and experience.
- Learning how to associate with your neighbors.

#### LEADERSHIP DEVELOPED

In Rhode Island, extension staff members developed a strong program of county project planning by the use of 4-H Club leaders. Aided by strong senior 4-H Club members, who proved capable assistants, these local leaders, through Extension's guidance, devised effective procedures whereby club members could work out their own program based on needs. Similar program planning was reported by other States.

It is still a problem to keep more youth above the age group of 14 to 16 years active in 4-H Club work. Those who remain become effective and efficient leaders, but far too many drop out. Other youth groups face a similar or even more difficult problem in holding the interest of youth at that age. A greater effort placed on developing programs that help with the distinctive problems of older rural youth, started in recent years, may be a partial answer to this problem.

#### MANY NEGRO YOUNG PEOPLE REACHED

The 4-H Club program among Negro youth in the South moved forward. Fat-stock shows were held in Alabama, South Carolina, Tennessee, Oklahoma, and Texas. Negro land-grant colleges offered 4-H short courses.

State and county camps for Negro 4-H Club youth were given added impetus. During the year the total number of county camps for Negro boys and girls reached 340. Georgia, Louisiana, and West Virginia have State camps. The legislature of South Carolina appropriated \$15,000 toward establishment of a State 4-H Club camp for Negro youth. Farm people raised an additional \$8,000.

A South-wide encampment for outstanding Negro 4-H members was authorized to be held at one of the Negro land-grant colleges in 1948. Ten Southern States held 4-H Club wildlife conservation camps during the year.

Enrollment of Negroes in 4-H Club work increased to nearly 300,000—a 10,000 gain over the previous year.

#### FARM LABOR PROGRAM RECRUITS AND TRAINS

In the farm labor program which Congress continued through 1947, Extension's big job was to help American workers take over farm jobs done by prisoners of war and foreign workers during the war emergency.

As the principal tool, it expanded information services by developing a series of regional guides and other materials for prospective farm workers. These called attention to the availability of farm jobs, and directed workers, trucks, and machinery to the areas of need in 42 States.

The guides were supplemented by 50 information stations set up along the routes migratory and other domestic workers travel. Stations and extension farm labor offices gave the current information these job seekers were looking for. Here, they learned where workers were needed, how many, what type, when, duration of the jobs, housing available, and prevailing rates of pay.

While giving this information to migrant workers, station attendants obtained from them information as to their origin, how they travel, what kind of work they wanted, and when and where they had found it. They also determined whether workers had definite arrangements for future work, and how long they expected to work in agriculture. At the end of this season all these data will be compiled in each region to produce the first authentic national census of the movements of migratory agricultural labor, which it is believed includes at least 600,000 people.

Migrants find it necessary to move into areas in which they have not previously worked, and to live under strange conditions. To help in such situations, Extension employed 35 special agents, who are commonly called liaison men, or migrant specialists. They gain the confidence of migrant workers, help them with their problems, and travel from area to area with the workers as they "follow the crops." In 1947, 32 of them were Texans who speak Spanish. This is the language of many thousands of the migrant workers.

#### MAJOR LABOR AREAS SURVEYED

With the cooperation of all States, Extension developed a Preliminary National Survey of Major Areas Requiring Outside Labor. This is a tool to help make best possible use of migratory and other "free wheeling" workers. The survey is built around 56 major producing areas and includes a crop map giving a picture of agricultural activities and a timetable showing periods when outside labor is needed in planting, cultivating, and harvesting.

#### SHORT-TIME STUDIES STARTED

Short-time farm labor studies were started in several States to obtain facts that would enable Extension personnel and farmers to handle farm-labor problems more effectively. Michigan and New York made studies as a basis for improving farmer-worker relationships. Indiana launched seven surveys dealing with changes in farm-labor conditions and labor utilization. Illinois made a study of farm-labor employment with special reference to daily and monthly wages, hired and family labor, bonus- and incentive-pay practices, custom work, labor and equipment exchange, and housing.

#### ON-FARM AND GROUP HOUSING IMPROVED

The year was one of substantial progress in getting farmers to improve housing and living conditions for year-round and seasonal labor. When war housing and building materials and equipment be-



came available, farmers were encouraged to push long-delayed plans for improving or building on-farm and group housing. Many of the 400 farm-labor cooperatives participated in housing projects which they financed by laying substantial sums of money on the barrel head. When the need for more farm help developed in 1947, the alarming shortage of farm-labor housing had eased considerably, the gain in on-farm housing being particularly strong.

In Yakima County, Wash., as a result of an aggressive campaign, more than 1,000 new farm-labor housing units were put on farms. Many States prepared plans and publications on farm-labor housing. Idaho, Illinois, and New Jersey materials are recent additions on this subject. Nebraska and Colorado were among the States making studies of farm-labor housing as a basis for future activities.

Generally, farmers are becoming more conscious of the importance of clean, comfortable, and adequate housing. It attracts a better class of workers, reduces turn-over, and improves the quality and quantity of work done.

#### HARVESTING PROGRAMS DEVELOPED

Extension has developed special harvesting programs for specific crops, such as small grains and sugar beets. Mechanics of the 10-State wheat-harvest program were perfected and expanded in 1946, when the record yield of 1,160 million bushels from 71 million acres was harvested in less time and with fewer men and machines than ever before. Combine outfits from coast to coast and 450 from Canada were mobilized for the harvest trek, which started in Texas and progressively moved to North Dakota and Canada. Kansas, champion wheat producer, reported: 6,218 custom combines crossed its southern State line at ports of entry; and 16,683 labor, 5,236 custom combine, and 3,256 truck placements were made. In 1947, with still larger acreages and production per acre, the harvest was handled even more smoothly, despite adverse weather which upset normal patterns.

The calendar year 1946 also marked expanding cooperation between the States in the transfer of needed laborers into areas of acute need. Extension funds were used to move more than 10,000 interstate workers and operate 159 farm-labor camps where more than 77,000 laborers were housed.

#### "HANDS ACROSS THE BORDER" BENEFITS FARMERS

The cooperative "farm hands across the border" program with Canada was continued with increasing benefits for farmers and workers in both countries.

Regular county extension personnel spent a total of 66,000 days helping farmers in the United States to solve labor problems. Other persons on special extension farm-labor pay rolls did 662,000 days' work on farm-labor problems.

More than 4½ million farm-labor placements were made by the slightly more than 6,000 extension farm-labor offices during 1946. This represented nearly 2½ million different individuals, including men, women, and youth. In addition, nearly half a million other persons not regularly engaged in agriculture did farm work as the result of efforts by more than 50,000 volunteer leaders through Extension's educational programs.



## WOMEN AND YOUTH HELP

While organization of women workers under the Women's Land Army had been dropped as a separate unit in the Extension program, the need for the help of women in getting crops planted, cultivated, and harvested continued. The number of these placements was slightly larger than during the preceding year. It reflected the return to short-time employment by women formerly engaged in war industries.

The youth program was continued under the Victory Farm Volunteer banner, with youth making up nearly one-fourth of the total placements. Of these town and city youth, 82,000 lived with farm families where they worked, 33,000 others were housed in camps, and some 470,000 lived at home and were transported daily to and from work. There was continuing emphasis on educational and work-experience values.

Sharing importance with Extension's mobilization of farm labor were its services in helping farmers stretch this limited supply of labor in all directions to meet the needs. Application of labor-saving work methods was another important step. Tobacco growers in Maryland and peach growers in South Carolina were taught easier and better methods in harvesting their crops. Kentucky farmers continued to learn more about better work methods in producing and harvesting tobacco—practices that saved an estimated 745,000 man-days' work in 1945 and even more in 1946 and again in 1947.

## HALF MILLION SEE LABOR-SAVING DISPLAYS

Another profitable vehicle of instruction was found in labor-saving shows or caravans. Display panels and demonstrations of working methods developed as labor-saving ideas were prepared and exhibited by many States at series of county shows. At each stop, local farmers exhibited and demonstrated gadgets and practices they had developed, and many others adopted them. In some States local dealers displayed new lines of labor-saving equipment.

Thirteen States sponsored these shows during the year—the fourth in which such projects have been conducted. South Carolina's 24 shows attracted more than 40,000 farm people. New Hampshire's 11 shows, held during the tail end of winter, brought out 6,628 people. Minnesota's 43 shows had an estimated attendance of 100,000. Indiana's 8-car special train made 56 stops. Over 66,400 farm people studied the labor-saving ideas contained in the 23 exhibits attended by 20 extension specialists. In all, more than 500,000 people saw labor-saving ideas for the farm and home in shows that were brought to their home county.

Through 1946, Extension helped to organize equipment and labor exchange programs in more than 15,000 communities. Many additional farmers were able to get more done by the custom hiring of still scarce and expensive labor-saving machinery and equipment.

## WORK METHODS REDUCE SPOILAGE

As inexperienced workers were brought into the farm-labor force it was necessary to train them in order that they might reach full productivity in the shortest possible time. Training in correct work methods also reduced the amount of farm produce spoiled through



improper handling. Extension conducted more than a thousand courses in which 62,000 farm operators, foremen, and supervisors were trained in how to use inexperienced help. Nearly a quarter million inexperienced farm laborers received training in how to do farm jobs.

### VETERANS GET ASSISTANCE

Returning veterans, with ideas of farming as a business, streamed into offices of county agricultural agents by the thousands. They wanted the answers—down to earth answers about farming as a business, where the best farms were located within the county, what land was worth, and how run-down the soil was on a certain farm they had been considering.

Veterans know that county agents are close to farmers, know their problems and their philosophy of life, and they call on the agents for guidance. Every case called for individual attention. General answers were available on the economic situation and the possible future of farming. But to give the veteran the individual advice he needed and wanted, the county agricultural agent had to consider the veteran's experience, education, background, and even his temperament and the type of farming he was most interested in.

Many young men without experience were advised to go to work for successful farmers to find out before they went into debt for land at high prices if they really wanted to farm. Many father-son partnership agreements were worked out whereby the son could take over the farm on retirement of the father.

In Tennessee the Extension Service cooperated with other agencies in holding county meetings for veterans. Farmers, bankers, lawyers, and businessmen served as teams to discuss veterans' rights and what could be expected in various professions or businesses in years ahead. An average of more than 250 veterans attended each of 30 county-wide meetings.

### VETERANS' WIVES HELPED, TOO

Veterans' wives, including war brides, also sought help from home demonstration agents. Some brought different manners of living and had different food likes. Others came from foreign countries. Many were preparing to raise families and in need of child-care training.

Home economics extension staffs conducted courses in homemaking for the brides of student veterans at many State colleges. New York groups held "neighbor's days," and members invited brides of former servicemen to attend. In Broome County, a single meeting brought out 13 English, 1 French, and 1 Scottish bride to enjoy the exhibits of achievements by homemakers.

In Illinois a group of British brides seemed a bit concerned about how to make good coffee for their United States veteran husbands. An extension group demonstrated American coffee-making techniques.

### HOUSING—A RURAL PROBLEM

Farmers, too, have their housing problem. Many farm homes have been abandoned over the last quarter century, and most of these are beyond repair.

New or improved rural homes were among the top-priority requests



throughout the year. Better housing is not a new problem; it is one that farm families have been forced to sidetrack for years. Extension agricultural engineers, architects, county agents, home demonstration agents, and other extension workers answered the call. Conferences and workshops, even college short courses, were arranged to bring extension personnel up to date so that they could properly answer the many demands.

Surveys show only about 10 percent of the 6 million farm homes are in reasonably good repair and have ordinary modern conveniences. More than 25 percent need major repairs and full modernization. Others need some repairs and modern facilities. More than a million new rural houses are needed.

#### PROPER PLANNING EMPHASIZED

The Extension Service furnished bulletins and plans, held general meetings to cover general remodeling or building information, gave methods and result demonstrations and oftentimes personal service. Planning before starting to build was emphasized.

In Arkansas, farmers saved more than a million dollars after extension workers showed them how to make better use of labor and native materials in building 1,854 new homes.

As an example of the plans being made by rural people for remodeling, an extension survey in Autauga County, Ala., showed that 76 planned to build new homes and 164 planned to remodel. Although material and labor shortages prevented great accomplishment toward the goal, the ground work was laid with planning meetings.

In Cascade County, Mont., 17.5 percent of the farm families plan to build new homes and 48 percent want to do some remodeling or major repair work.

Along with the demand for new homes and remodeling comes a demand for water systems, sewage disposal, and electricity. Extension gave advice throughout the year on the installation of 41,500 water systems, 33,000 sewerage systems, and 21,000 heating plants in farm homes.

The 1945 rural census showed less than 30 percent of the farms have running water in the house, yet 45 percent have electricity. With reasonable farm incomes the demand for improvement of homes and living facilities will increase.

Extension workers, in cooperation with the Rural Electrification Administration, helped farm people to obtain electricity and gave assistance in the proper wiring of the farmstead and selection of electrical equipment. They also showed farm people new uses for electricity on the farm. Three million farms now have electricity available and 2 million more will have it soon.

Most of the farm homes being remodeled will have at least some improvements made in kitchens. Since women spend most of their working hours in the kitchen, they want it convenient, light, and airy.

#### KITCHEN PLANS HELP A QUARTER MILLION

Close to a quarter million farm women were helped with kitchen-arrangement plans during the year. Home economics extension personnel also helped nearly that many more to arrange more storage space.



Almost half a million were assisted with screening or other methods to keep flies and other insects out of houses.

Colorado reports 1,545 kitchens rearranged or improved in 28 counties. In Molokai County in Hawaii, 38 women made noteworthy kitchen improvements providing more storage space and better arrangement.

In Tennessee, each county home agent selected a well-arranged kitchen to exhibit to club members, and planned tours. As a result, 722 women made definite improvements in kitchens.

Installation of a modern bathroom, next to kitchen improvements, was perhaps the greatest desire of rural women. Plans for remodeling often included installation of a water system and modern toilet and bathing facilities. Improved lighting was emphasized in many States, partly in connection with more electrification of farms, but especially through getting farm women to place lights properly.

Storage space has always been a problem. Home demonstration agents designed and exhibited functional clothes closets and provided bulletins and plans showing how they could be made.

Delaware home agents found no problem in creating interest in interior improvement of rural homes. "Interest doesn't need to be aroused; it's right here. What we need is time to help all those people who want information," one agent wrote.

#### 4-H CLUB MEMBERS IMPROVE ROOMS

A total of 160,000 4-H Club boys and girls improved rooms in their own homes during the year.

In Utah, extension specialists are spending much time with people who are actually building their own homes. Located miles from the source of supply of material and skilled labor, these men and women are working away on their dream homes. Many people log their own lumber, get it custom-cut at a sawmill, and then season it well. These people are building into their homes monuments to their patience and diligence.

#### FAMINE EMERGENCY CAMPAIGN AIDED

Extension played its role in helping to save Europe and Asia from starvation. County extension staffs spent much time in campaigns to produce more and save more food.

The use of high-producing varieties of grain and of hybrid seed corn helped to increase production. Better fertilization of land and better farming practices were urged and these, too, helped. Home demonstration agents showed people how to save critical foods by using substitutes; how to preserve more of the garden by proper canning and freezing methods.

Farm people changed many of their methods of feeding livestock to save wheat, corn, and oats. Livestock and poultry flocks were culled to the limit to eliminate feeding animals and birds that were not producing enough.

Many States prepared emergency folders on the saving of food and grain. Extensive radio and newspaper campaigns were started by extension information staffs to inform rural and urban people of the crisis and tell them how they could help.



## ACTION TAKEN ON WORLD AND COMMUNITY PROBLEMS

Through Extension's parent and family-life education program, parents are learning to train youth wisely and give proper guidance. Children and parents alike are learning how good human relations fit into the home and community. Families and individuals are finding their own answers to difficult situations. Twenty States now have a well-developed program. Nearly 200,000 people were enrolled in discussion groups.

The child-development and family-life study has been a means of strengthening family ties. In Hawaii, for instance, extension workers helped to develop a "basic seven" family-life chart—patterned after the well-known nutrition chart—which served as a guide in developing healthy family and child relationships.

Many States reported programs that promoted family and group recreation and improved parent and youth relations. In Massachusetts, 4,603 rural families set up home recreation programs. One community in West Virginia sponsored family picnics on the school-house lawn every 2 weeks. After the meal, group games and singing aided better relationships within family circles and among families of the community.

Older youth groups were assisted through discussions on preparation for marriage. Thousands of 4-H Club girls participated in child-care programs, assisting in the care of brothers and sisters or neighbor children.

## COMMUNITY IMPROVEMENT SOUGHT

Better farming and homemaking are not the whole story. The community is also a part of balanced farm living. Strong organizations and churches and a community providing needed services, including modern roads, electricity, health facilities, and recreation add to both the pleasure and profit of farm living. Too often when these are taken for granted, an inactive and decadent community results. There are the struggling church, the divided community, the poor school-house and ineffective local organization, and a deficiency of community services. Young people who are unable to find adequate opportunities for recreation and guidance call such a place a "dead" town and go elsewhere for recreation and education. Often the people no longer consider their own community a desirable place to live.

In more than half the States extension specialists in rural sociology and recreation were employed. These persons lent a hand in community planning, working with county extension agents and local people. More demand is being made for their time. They are assembling social information for county extension workers and helping them to interpret it for better extension planning toward better communities. They assist farm bureaus, granges, and other rural organizations to improve their programs and activities. In 15 States, annual leadership institutes were held for rural pastors.

In most States, 4-H Club groups or young-farmer groups are the backbone of organized recreational improvement programs in the rural community. Iowa, in many counties, has a strong organization of young married farmers who with extension planning organize community entertainment. Meetings are divided equally between recreation and education. In New Hampshire, the young farmers' group in Belknap County held a ladies' night and found the women interested



in a similar or joint organization to discuss problems from the family standpoint.

Practical application of rural sociology has long been accomplished by extension workers. In Illinois a rural chorus has been organized by extension personnel and has appeared at many important State-wide meetings of rural and city people. Twenty counties contribute 900 voices to this chorus.

In North Dakota, Extension is carrying on a little-country-theater movement. Not only do the amateur actors get a thrill and inspiration out of staging plays and pageants, but the rural people find listening and watching a great pleasure. It proves a great relief from the run-of-the-mill movies that find their way to small rural communities.

All extension work aims toward a higher level of rural living. Sociology and recreation specialists along with county extension workers and local leaders are getting calls for more help. These wants include community improvement, leader-training, planning effective meetings, group discussions, and recreational programs.

The Extension Service sponsored a joint Rural Church-United States Department of Agriculture Conference during the year. It was attended by representatives of 13 denominations and many organizations. The church groups discussed their problems, and Department of Agriculture agencies expressed interest in closer working relations with the churches.

#### EXTENSION AND CLERGY COOPERATE

Increasing cooperation is being shown in many States between extension workers and rural clergy in working on community recreation, religious, and educational problems.

Oregon held a successful institute for rural pastors, lay leaders, and extension personnel which led to a cooperative attack on rural-life problems.

Qualities of leadership, developed through Extension's process of organization and teaching, are enriching community life throughout the Nation. Cooperation with local agencies has been one of the features of the home demonstration program for more than 30 years.

Better citizenship, better schools, better communities all have been aided by home demonstration and 4-H Club groups in every State and Territory covered by the cooperative extension program. More than 35,000 4-H Clubs have participated in community-improvement projects.

Rural and community churchyards in South Dakota were beautified and landscaped under leadership of these groups. Extension landscape and forestry specialists aided with the plans, and farmers assisted with heavy-dirt moving and planting of shrubs and trees.

A small Vermont community (Brownsville) landscaped the area between the community church and town hall as a memorial to the citizens who served in the armed forces.

International questions are just as important to farm people as they are to any other citizens of the United States. In many States, home demonstration and 4-H Clubs spent many discussion sessions on United Nations, national defense, and similar subjects. Farm people want to know more about world trade and national and international economic problems so they can better plan their business operations.



A group of farm women from Franklin, Chittenden, and Washington Counties, Vt., chartered a special bus for an educational tour to New York to see the United Nations session in action. Arranged by extension staff members, the educational visit also included a trip to Lake Success for a session of the Economic and Social Council of the United Nations.

#### INTEREST SHOWN IN ATOMIC ENERGY

How the Extension Service is responding to the interest of rural people in public policy was shown in Maryland and other States. In cooperation with the Federal Extension Service, the Maryland Extension Service employed a well-known scientist to give authoritative talks on atomic energy. He talked before farm organizations and other rural groups during the spring of 1946. His discussion brought out 9,195 listeners to 49 lectures.

As a result of the success of the pilot series of lectures in Maryland, the Extension Services in New Hampshire, Maine, and Minnesota later engaged this scientist. In these States an equally great interest was shown by rural people in this new subject.

An increasing number of 4-H Clubs devoted a part of their club meetings to discussions regarding their responsibility in community and world affairs.

#### WORK DONE ON RURAL HEALTH

What could be more important to better rural living than good health? That's what millions of people in rural America are asking. They're more health conscious than ever before.

Medical authorities agree that there should be a minimum of 1 doctor for every 1,000 people. Some rural communities have only 1 doctor for 2,000 or even 10,000 people. Nearly 1,200 rural communities have no recognized hospitals, yet they contain a population totaling 15 million. That's over half of the total rural population of our Nation. Public health services are strongest in large cities.

Physical examinations for the service forces during the war period showed us that rural youth was not so healthy as we had thought. Fresh air, sunshine, plenty of good wholesome food, and the many other benefits of rural living didn't correct many ailments that regular physical examinations would have shown. "It was just too far to a doctor." That was the story too many times.

In many States the Extension Service cooperates with the State department of health to inform people of opportunities under the new hospital act. A number of States are conducting surveys to analyze their health needs.

The Extension Service has been asked to help approach the health problem in a new way. Nine States have added specialists to assist in organizing communities to consider their health problems. Nebraska's Extension Service has assisted with a rural health program for more than 7 years.

In Clinton County, Ohio, a rich agricultural area with 25,000 people, only 17 hospital beds were available. Only 14 percent of the babies were born in hospitals. Community health-study groups found these and other situations in a survey, and recommended plans for a community hospital supported by a bond issue. Local farm-bureau and



Grange committees visited every farm home in the community telling the story and seeking support for a hospital.

In Wyoming a hospital survey in rural areas is being carried on. Many States have rural health programs. In most instances extension-organized plans have gained momentum and health agencies, medical associations, and other groups are aiding in surveys to find the facts.

#### INTEREST IN FARM AND HOME PLANNING GROWS

One of the greatest challenges to all extension workers is the growing interest of farm people in farm and home planning. A decided tendency on the part of farm people is to want to improve their business and living procedures.

From the beginning farm people have made plans for the operation of their farm, for the use of their time, and for the use of available funds. Too often this planning was indefinite and partial and fulfillment fell short of expectations because of these weaknesses. The plans were not recorded where they could be checked and progress, if any, determined.

Planning the farm and home as a unit seems to put the program where it belongs. The farmer, the wife, and the children all take an unselfish interest in the goal. Better farming means more money for improvement of the home, the barn, and the livestock; more funds for the education of the children.

In Missouri, for example, 108 of the 114 counties held farm and home planning demonstrations last year. "Balanced farming," as Missouri people call it, has progressed beyond the demonstration stage. It's being put into practice on many farms.

Aided by technicians from the Extension Service, these demonstrations take the form of a clinic. The entire farming program is analyzed in light of the family living needs, and plans are made for desirable adjustments. Organization, production practices, needs for the family food supply, and the use of available capital and income are all considered.

Such projects enable the extension worker to approach the farm and home program from the farm-family angle. They give the farm family the benefit of the technical knowledge of the extension personnel in their planning operations.

The in-service training of extension workers to assist farm people with their planning problems has played a dual role. It trains technicians to assist farm people and at the same time brings all extension workers closer to the problems of actual farm operations.

#### MORE WORK WITH NEGROES

The job of 790 Negro extension workers in the second year of peace did not end with helping the farmer and his family master methods of food production. These workers continued zealously to help farm families improve themselves, their homes, and the whole area of community welfare.

Extension work with Negroes has been carried on by both white and Negro agents in the South since the beginning of cooperative agricultural extension work in 1914. But during the 2 years the Bankhead-Flannagan appropriations have been available, much new



help has been added. Negroes, employed to work exclusively with their own race in the South during the past 2 years, include: 75 county and 4-H Club agents, and 110 home demonstration agents. Twelve more Negro supervisors have also been obtained.

With many new extension workers, in-service training proved important. A South-wide workshop and regional conference was held for Negro supervisors at two of the Negro land-grant colleges. These supervisors then held workshops for the agents to improve application of extension methods and broaden the scope of the extension program.

During the year stress was continued on several age-old problems, but definite progress continues. These problems include: Improving landlord-tenant relationships; improving health and living conditions of the tenant and share-cropper Negro; producing more food to improve the diet through gardens, cows, poultry, and hogs; producing higher income from farm operations.

Keeping his hands on the plow to help meet the Nation's food and fiber needs, the Negro farmer also tried to create a better life on the farm. His production of side-line crops in the South's great Cotton Belt was encouraged by extension workers. Livestock, poultry, dairy products, peanuts, hay, sweetpotatoes, cucumbers, and strawberries were common on Negro farms.

Curbmarkets, which Negro extension workers have helped farmers to establish, provided an outlet for part of the side-line crops. These side-line crops were grown from land formerly devoted to cotton, and the program was in line with the balanced-farming recommendations of the 7-Point Cotton Program.

A major part of the Negro extension agent's work throughout the year was in helping the farmer to create a better life for himself and his family. Though shortage of building material was a bottleneck, it did not stop the more determined farm people. Some of them bought surplus military units, dismantled them, hauled them to their farms, and used the material in building or remodeling homes.

Negro farm ownership in the Southern States increased by about 16,000 farms between 1940 and 1945, according to the Bureau of the Census. The desire for farm ownership has continued among the South's Negro farmers.

In 42 counties in North Carolina where Negro county agents are employed there are more than 44,000 Negro farm families. Extension personnel aided 28,000—nearly two-thirds of the total—in improving the family food supply during the year.

One of the first tasks in connection with this problem was to gain the cooperation of the landowner in getting more land for gardens and for the keeping of poultry, hogs, and dairy cows. A better appreciation of the need for this increased food supply by farm families was also necessary. Extension agents worked diligently on both these problems.

In Alachua County, Fla., as in most other heavily Negro-populated counties of the South, health and sanitation were stressed by extension personnel. Thousands of families screened their houses or porches and improved their sewage-disposal and water-supply systems. In this county more than 700 Negroes, through encouragement by extension personnel, attended X-ray clinics to be examined for possible tuberculosis.



In Union County, Ark., 568 Negro families improved their home grounds with fences, walks, and drives. Negro farm women and 4-H Club girls in the United States canned more than 30 million quarts of food last year.

In addition to other work, Negro county agents helped hundreds of veterans get started in farming both as owners and as tenants. They cooperated closely with other agencies in carrying out on-the-job training of Negro veterans.

## FARMERS IMPROVE METHODS

### FARM-AND-HOME RECORDS KEPT

More farm families are keeping farm-and-home accounts today than ever before. Although aid in filing income-tax returns is undoubtedly an important reason for the increase, farm families also are interested in improving the efficiency of their business. The Extension Service conducts educational programs to assist farmers in keeping and using records for this purpose.

In Ohio, Colorado, and other States, State bankers' associations are cooperating with Extension in helping to make this program effective. About 50,000 farm account books are distributed annually in Ohio by the Extension Service and the bankers' association.

In North Carolina, extension workers assisted more than 12,000 farm families with financial planning. In Greene County, Ark., 871 farm families were furnished with farm account books to aid their farm accounting program. Nearly a quarter-million 4-H Club members kept personal-account records during the year.

Farm-outlook information continues to be in demand by farm people. Farmers are giving more attention to planning their crop and livestock-production programs to meet market prospects. Farm women, too, are interested, and extension field forces report that women want to understand and participate in record keeping and know more about the income from various enterprises than they did 10 years ago.

Representatives from all States but one attended the National Outlook Conference in Washington last fall. Extension specialists in farm management, economics, and home management from the many States returned from this conference and aided county personnel in holding similar local meetings.

In Oklahoma, 16,187 families reported using the economic-outlook information presented at county meetings throughout the State.

Such guidance was particularly helpful to young people and veterans who were looking for new opportunities in farming. While serving the farmer with outlook information, extension people were also able to warn against heavy indebtedness for more land.

Rural United States has shown increased interest in questions of agricultural policy. Facts both for and against proposals in agricultural price policy, parity, and similar issues were prepared so that people could carry on an intelligent discussion within local groups.

Only through intelligent discussion of such questions will farm people learn the basic principles behind agricultural policy.



## LAND TENURE PROBLEMS ANSWERED

Farmers are buying farms, and GI's and other young farmers are becoming established on farms in increasing numbers. Their relationship to the land is shifting and their interest in farm tenure increasing.

Extension activity in farm tenure includes suggestions on father-son business agreements, improved farm leases, property transfers, and employer-employee relations. For instance, Michigan, Illinois, Montana, and South Carolina have emphasized father-son business agreements and other lease arrangements, and elements contributing to their success. Minnesota, North Dakota, Texas, and North Carolina have emphasized the advantages of equitable employer-employee relations. Extension economists in Iowa developed a means whereby the costs of soil conservation can be made a part of the farm-lease agreement.

## MARKETING GETS MORE ATTENTION

Expanding markets for farm products and improving marketing methods and facilities are among Extension's programs for rural America. Farm people are becoming better informed concerning marketing problems and conditions that bring about improved markets for their products. They are planning to avoid glutted spring and summer markets for eggs and poultry and other farm products, the production of which is highly seasonable. They are learning how to take advantage of high-priced markets by planning production.

Extension work in egg marketing provided the educational leadership for Mississippi farmers to develop and organize a cooperative egg-marketing program. This cooperative maintains five routes over which trucks pick up eggs at the farms. By marketing eggs promptly after they have been laid, farmers find a better market and obtain higher prices for them. At the same time consumers get fresher eggs. Return loads of feed are carried to the producers if they desire to buy through their cooperative.

In Russell County, Va., 80 percent of the wool produced is marketed through the 15-year-old wool cooperative. Through Extension's educational program, farmers have found that when they tie the fleeces individually they get a higher price than when wool is bagged loose.

During the big 1946 grain harvest, more grain graders were needed. In Illinois, extension specialists trained 95 returned servicemen in grain grading and elevator management. Similar schools were held in other States. One of the largest was held at Amarillo, Tex., for 103 dealers and 18 farm representatives.

In New Jersey the Extension Service organized a project of early-morning picking and direct delivery of sweet corn to markets. Consumers paid better prices for corn that could be served 6 to 12 hours after cutting.

More recently the Agricultural Economics Section of the Extension Service has been working closely with administrators of the Research and Marketing Act of 1946. They will develop projects designed to improve marketing conditions under title II of the act.

Twenty-six States have already submitted projects to be carried on under the act. Emphasis is being given to those activities that deal with improvement of quality, emergency situations, disposal of surpluses, expanding markets, and improvement of marketing methods



and facilities to reduce loss and inefficiency and increase producer returns.

#### DAIRYING CONTINUES AT THE TOP

The cow, sow, and hen will perhaps always remain the Nation's greatest producers of farm income. And at the top today, as in past years, is the dairy industry. Few farms in rural America are without one or more cows. Demand for dairy products continues strong. Production is high. So is income. But so are production costs.

The dairy industry, from the large commercial creameries down to the small-herd operator, has looked to Extension for many years for guidance. The 8-Point Dairy Program, begun during the war to boost dairy production for needed nourishment for military and civilian forces, is being continued as a long-range program.

The goal is logical—the greatest production of milk of highest quality consistent with economy.

During the year the number of dairy herd-improvement associations operating in the United States increased more than 23 percent. The total reached nearly 29,000 groups. Only a scarcity of trained supervisors prevented further expansion.

It was 40 years ago that a small group of farmers in Newaygo County, Mich., decided to band together to keep production records of their herds. They knew that breeding, feeding, and care made some cows produce more than others. It was from that cooperative program, aided by advice from the United States Department of Agriculture and a land-grant college, that the dairy herd-improvement association program began.

In California, DHIA work has been operating for 25 years. During that period, butterfat production has increased annually in the State to a yearly increase of 72 million pounds. At the average price paid for butterfat in 1946, this increased production returned 76 million dollars to herd owners in the year.

Quality production has been stressed along with quantity. Dairy demonstrations by 4-H Club members aided materially. Missouri extension personnel helped to plan construction of 592 approved-type milk houses and 558 milking barns during the year. In Wisconsin, by helping to solve a quality problem, extension dairy specialists helped one plant to spread \$370,000 in added income to 900 dairy patrons; more than \$400 per farmer.

The DHIA proved-sire program conducted by extension personnel in most of the States has resulted in more dairy farmers' realizing that better sires bring about better production in future generations. The number of proved sires registered with the United States Department of Agriculture is increasing rapidly.

Through artificial breeding, more farmers are getting registered and proved sires for their grade herds. This has brought the cost of breeding from better sires within reach of the average small dairy farmer. Many artificial-breeding groups are cooperative. The bulls are owned by the association and the entire program is coordinated through county and State extension personnel.

Extension emphasized the use of year-round pasture and of roughage to save high-cost grain feeds. To better acquaint dairy specialists in each of the States with the research work being carried on by the Bureau of Dairy Industry at the Agricultural Research Center,



Beltsville, Md., all were invited to attend conferences in Washington, D. C., and Beltsville. These 5-day conferences in the spring of 1947 were attended by 84 specialists from 44 States.

More than 100,000 4-H Club members enrolled in dairy projects during the year.

#### BALANCED MEAT-ANIMAL PRODUCTION IMPORTANT

Production of meat animals continues to be an important farm enterprise both for its financial return to the farmer and because it furnishes the family with one of the important elements of the diet.

The past year turned out to be "hectic" because of "on-again-off-again" price controls for meat animals and their products. Farmers found it difficult to plan production, and extension specialists had to be alert to changing situations.

To meet demands for increased meat supplies and at the same time conserve feed to aid starving people, Extension's activities centered on: (1) Balancing livestock numbers with food resources by culling inferior animals. (2) Expanding use of pasture forage and roughage to allow more production and also cut costs. (3) Wise use of protein, vitamin, and mineral supplements to allow available grain to make more profitable gains. (4) Cutting losses in numbers and weights by controlling disease and parasites.

Nebraska reported excellent results in 28 cattle grub-control and 61 fly-control demonstrations. Held in all sections of the State, these demonstrations showed farmers and 4-H Club boys how to treat their own stock. County spray rings and the use of DDT in many States proved valuable.

Extension workers continued to stress the need of better flock and herd sires. This teaching gets slow results in some areas, while in others the response is outstanding. Brucellosis continued to be a baffling problem and caused great loss to swine and cattle producers. Extension and research personnel continued their efforts to find a solution to the Bang's disease problem.

#### HIGH-QUALITY EGGS STRESSED

Quality egg production and marketing along with efficient flock management were emphasized among poultry raisers by extension workers during the year. Scarcity of feed, brought about by the famine in Europe, resulted in slight decrease in poultry production from the wartime peak.

Keeping people informed of the trends and changes in the poultry industry was Extension's job. Educational campaigns on quality conservation by proper cooling, cleaning, packaging, and prompt marketing resulted in many farmers finding special markets for better quality eggs.

The all-pullet flock was advocated by most extension specialists as the best way to improve efficiency in production. This campaign was started in Iowa in 1943, when 65 percent of the flocks in that State were only pullets. By 1947, the percentage of all-pullet flocks had increased to 79. Egg production per hen had also increased.

The National Poultry Improvement Plan, operating in 47 of the States, is assisted or directed in most States by the Extension Service. Extension workers are also cooperating in the attempt to produce a meatier chicken in the "chicken of tomorrow" program.



Boosting the egg-quality program, Wisconsin planned a "good egg" show which carried complete information to farmers on how they could get better quality production.

Work with 4-H Club poultry projects was carried on in all States. In Washington, a junior poultry exposition was held with support from breeders, hatchery operators, and the poultry industry in general.

#### FARM-BUILDING PLANS AID MANY

Although housing got the first call in farm construction, increased income and need brought demands to extension personnel for half a million plans for farm structures such as barns, silos, poultry houses, milk houses, corrals, and safe bull pens. Farmers also wanted plans for ventilating dairy barns, waterproofing farm structures, and construction of mow dryers for hay storage.

Agricultural-engineering specialists and county agricultural agents helped to meet these many demands. Missouri extension workers alone helped 8,200 farmers with the construction of 3,445 temporary silos to hold 415,000 tons of feed which increased the feed value nearly a million dollars.

When hope faded for new machines to replace the ones that had become decrepit and obsolete, county extension agents helped to instruct farmers on methods of reconditioning to achieve the seemingly impossible—make them do for another crop year.

Farm-machinery pools were organized in some areas so that farmers could lend one piece of equipment to get the use of another they did not have. County agents assisted farmers with 600,000 machinery problems. Half of that number of farmers attended maintenance and repair schools. In Kansas, 8,800 farmers in 51 counties attended helped to meet these many demands. Missouri extension workers helped 24,000 farmers with machinery meetings and service calls.

Farm mechanization continues to make great strides in all phases of farm operation. When reduced demand for war equipment allowed machinery companies to concentrate on improving farm machinery, they developed new ideas, worked out by research specialists and farmers.

Mechanization was not confined to new designs of tractors and implements for farming. Development of gutter cleaners for dairy barns, hay-drying equipment, and numerous other improvements followed the electrification of many farms. Cotton farming is becoming more mechanized each year, and extension personnel is constantly in touch with these developments and aiding them.

Thirty-three States held short courses for 4-H Club tractor maintenance. Nearly 25,000 4-H Club boys carried on projects in farm engineering. In 45 States, 4-H Club rural electrification projects were sponsored in cooperation with the REA and private power concerns.

#### SEED IMPROVEMENT PRODUCES MORE

It's almost impossible to think of farming and not consider wheat, corn, oats, and other grain and field crops. From these grains come meat, dairy, and poultry products that earn the money to provide many farm families with a better rural living.

Seed improvement continued to be an important extension program. In fact, extension agronomists from 41 States, in answer to a question-



naire, listed seed improvement as one of the most important phases of their work. Pasture improvement and expansion of use of forage crops were mentioned by 31 as of major importance and the use of lime and fertilizer was listed by 19.

The 39 crop-improvement associations, Extension-organized in most of the States, now have 24,954 members who raise seed for certification. Certified seed boosts crop production as much as 25 percent. State crop-improvement programs have advanced to a point where most farmers are able to get first- or second-generation seed from certified fields for planting. In only a few crops is that impossible. Partly through Extension's crop-improvement programs, grain production reached a point where our Nation had millions of tons to spare to feed starving nations during 1946.

The Extension Service continued to emphasize the use of hybrid corn, and in some States practically 100 percent of the acreage is seeded to these new and higher producing varieties. Growing of these hybrids has made it possible to increase corn yields 10 bushels per acre over yields of open-pollinated varieties. Shifts from old to new hybrids likewise increased the yield per acre another 3 bushels.

From a small beginning in 1933, when acreage was confined almost entirely to Iowa and Illinois, hybrid corn expanded rapidly. In 1946 hybrids occupied more than two-thirds of the United States' total corn acreage. Extension's demonstration plots had much to do with this increased use, which probably resulted in nearly 700 million bushels more corn in 1946, when the grain was so greatly needed.

Wheat varieties resistant to stem-rust and other diseases have also increased production in the Midwest wheat States. Here the land-grant colleges, cooperating with Federal dry-land experiment stations, have developed new varieties. These were given field tests through extension cooperators to prove their worth and obtain adequate supplies of seed for distribution.

#### TEST PLOTS SUPPORT RESEARCH

In the past 10 years, more than 50 improved varieties of wheat have been distributed to American farmers. These developments were all supported by Extension's program of demonstration test plots to show farmers what the new varieties would produce compared with their old varieties under the same conditions.

More than 4 million bushels of seed wheat got certification from the different crop-improvement associations during the year.

Illinois offers a good example of the value of seed-improvement work. In 1945, after Clinton oats were found to outyield other varieties and be resistant to the new oat disease (*Helminthosporium*), extension agronomists obtained 231 bushels. In cooperation with the crop-improvement association, they put out the seed, and it returned 14,179 bushels. In the spring of 1946 this went to more than a thousand growers in 71 Illinois counties for seeding of 10 acres by each cooperator. Growers agreed not to sell the product outside the county in which it was grown. The average production was 61 bushels an acre. In the spring of 1947, Clinton oats were available to most Illinois farmers, when only 2 years before only 231 bushels were available in the entire State.

County agents and agronomists also cooperated to improve permanent pastures by using better seed mixtures. Proper liming and ferti-



lizing were also stressed. Winter pastures with a good legume were emphasized in the South.

In 19 States work with fertilizers and lime was carried on by extension personnel. Weed eradication also got major attention in some areas. Central State areas stressed soil testing, and many offered convenient facilities to farmers for analyzing their soil.

Agronomists cooperated with programs to use new chemicals to control noxious weeds and in weeding many crops. Most States carried on some work, and in Utah, through extension assistance, power sprayers were purchased by 12 counties. Many acres previously infested with weeds that could not be controlled by cultivation were put back into crops as a result of the killing of weeds with 2, 4-D and other chemicals. Great promise is seen in the use of such spraying in connection with growing of cereal crops.

#### COTTON PROGRAM PROGRESSES

Cotton seems to be finding a better spot in the South's new pattern of agriculture, thanks to Extension's 7-point cotton program. These steps are:

1. Fit cotton into balanced farming.
2. Take care of your soil.
3. Get together on the best variety.
4. Make your labor count.
5. Control insects and diseases.
6. Pick and gin for high grade.
7. Sell for grade, staple, and variety value.

The South's number one farm product continued to offer a grave problem, which entails adjustment, income, mechanization, competition, price policy, quality, and low-cost production.

Almost half of our farm population lives in the 13 Southern States, where most of our cotton is grown. These people have only a fourth of the cropland of our Nation. Their income per person is not much over half that of other farmers. Cotton produces a third of the South's farm income and about half of the South's 3 million farmers grow the crop. Better rural living in the South centers around solution of the problems of cotton farming.

For many years Extension has expounded the various points of the 7-point cotton program individually. But 2 years ago, in cooperation with the National Cotton Council, 16 other private agencies, and other agencies of the Department of Agriculture, the concerted seven-step cotton and balanced-farming program was developed.

#### Million Leaflets Distributed

During the past 2 years the Extension Service has supplied, through State and county extension service organizations, more than a million copies of short leaflets explaining these steps. The Cotton Council, the Ginners' Association, dealer concerns, and other private agencies have circulated similar information to even more farmers. Local extension groups have localized various steps to show how the program can be carried on in certain communities.

Showing the true cooperative approach of the extension program, 10 State extension services and 8 agencies of the Department of Agriculture produced a movie, *Men Who Grow Cotton*. Prints were fur-



nished to each cooperating State. The film is being widely used. The Cotton Council is printing and distributing thousands of leaflets to explain why farmers and the public should see the movie and discuss the issues it raises.

But what has all this done for the South's number-one agricultural problem? At present 45 percent of the cotton grown is in one-variety communities. The farmer is getting higher yields from better varieties. He is growing better and more uniform cotton. In Texas, the 337 communities that adopted one variety had an average of 198 pounds. The State average production was 130 pounds. The increased yield of 68 pounds of lint to the acre plus premiums for staple and quality resulted in an added income of 40 million dollars to these farmers.

Extension cotton agronomists in South Carolina say that in 1928 only 18 percent of the cotton produced in that State had a staple length of 1 inch or longer. In 1946 more than 98 percent of the cotton grown was an inch or longer. During that time the use of long-staple varieties and approved cultural practices increased the production of lint cotton from 181 to 360 pounds an acre.

In addition to Federal cotton specialists, each of the Cotton States has full-time extension cotton agronomists and other specialists. County agricultural agents and assistants have spent much time on the program to help the cotton farmer with his many problems of production, storage, and marketing.

#### Seed Production Saves Dollars

Seed has been no small problem to the new program, as more than 80 percent of the cotton produced is from four varieties. Nearly 25 million bushels of cottonseed are required to plant the crop. To meet this problem, a system of seed multiplication has been developed in one-variety communities. Seed is multiplied and redistributed at the estimated saving of 1 dollar a bushel by isolating plots grown primarily for seed. This method is estimated to be saving 10 million dollars annually.

Modern storage facilities have been set up in several Southern States where seed can be stored and properly cured. Extension personnel is pushing the use of good storage facilities, as much seed is lost because of high moisture content.

Long on the program of Extension has been treatment of cottonseed with mercury dust to control fungus diseases. Approximately 80 percent of the seed is now treated.

The ginning of cotton is an important link between production and marketing. A part of the effort in the extension cotton grade-improvement program is directed toward assisting ginners to get effective equipment. With new equipment they can properly dry, clean, gin, and bale the farmer's cotton. Every dollar spent on new equipment makes the farmer more profit through better ginning. Every cotton gin in the country is being reached through this program. The National and State ginners' associations are vigorously promoting these practices.

A total of 29,000 4-H Club members farmed almost 45,000 acres of cotton to participate in youth project work.



## TOBACCO VARIETIES IMPROVED

County and State extension workers spent a total of 20,000 days assisting tobacco farmers during the year. Development of disease-resistant varieties has been the most noteworthy advance in tobacco production in recent years. North Carolina tobacco farmers were encouraged to plant the Oxford 26 variety, which is resistant to Granville wilt. Nearly 60,000 acres were planted, and the farmers made a combined gain of more than 6 million dollars in returns over those planting nonresistant varieties.

Blue mold was controlled in plant beds with new fungicides recommended by extension workers as a result of information obtained in experiments. In North Carolina plant beds sprayed produced more than twice as many healthy plants as those not sprayed.

## SOIL IMPROVEMENT MEANS MANY THINGS

Soil-erosion problems and soil improvement have long been in Extension's broad educational program. More than 25 years ago in Texas and other States, the county agents did much terracing, contouring, and other work to control soil blowing and washing. Since that time county agents have worked alone as well as with other governmental agencies in soil-improvement work. The Extension Service is the education and information arm of the soil-conservation program. Through working in cooperation with the Soil Conservation Service, great progress has been made in recent years.

Extension teaching had its hand in nearly every one of the 3½ million operating units in the 1,586 soil conservation districts in the United States. Today these districts make up more than half of the farm land of our Nation.

Extension workers advised nearly a half million farmers on land-use problems during the year, and another half million on the use of crop rotations. More than a half million profited from county extension workers' advice on the use of cover or green-manure crops. More than a half million farmers in soil-conservation districts were assisted with education for organization and operation, and 295 new soil-conservation districts were organized.

During the year landowners and operators in Alaska were authorized to organize soil-conservation subdistricts. Hawaii also enacted a law authorizing districts, and they probably will be organized soon. Puerto Rico and all the 48 States now have operating districts. Alabama and South Carolina are 100 percent organized in soil conservation in this regard.

The Extension Service does not organize soil conservation districts. Extension does, however, have the responsibility of informing farm people of the need for soil and water conservation.

Soil improvement means many things. To one farmer it means getting water on the land. To another it means getting water off the soil. To still another it means holding the limited amount of moisture in the soil and preventing run-off, which carries away valuable plant-building nutrients. It also may mean applying fertilizer and humus.

Soil erosion control and improvement tie in closely with land-use planning. Wise rotation of crops, use of winter cover crops to pre-



vent loss of soil and plant food, strip cropping, terracing, and reforestation all are tied in with soil conservation.

#### 4-H Club Young People Conserve Soil

In the 4-H Club program, more than 100,000 boys and girls engaged in some phase of soil conservation on a project basis.

One of the most notable examples of a great soil-utilization project in which Extension has played a part is the Columbia River Basin. Its value is not to the State of Washington alone but to Oregon, Idaho, Montana, and Wyoming as well. Through irrigation, this project is bringing many acres of land into agricultural production. These will help to replace some of the acres lost to agricultural production through soil erosion, not only in nearby States but all over the Nation.

State land-grant colleges have developed demonstration farms in the Columbia Basin to show new settlers the types of crops that can be grown, the use of water, fertilization practices, erosion control, crop rotations, and other useful information. The Extension Service is using these irrigated farms as models to show the farmer what he can do.

#### GARDENS GROWN AND GROUNDS BEAUTIFIED

Providing the family food supply and beautifying the home grounds were leading horticultural activities among farm families during the year. Home gardening increased greatly during the war. People continued that interest and planted more perennials, particularly fruits. Extension workers helped more than a million families improve their home food supply of vegetables. Commercial growers of fruits and vegetables called on extension aid to solve many problems regarding varieties, fertilizer, cover crops, weed control, irrigation, spraying, harvesting, packaging, and marketing.

Many States did outstanding work on home improvements in connection with housing and gardening programs and the farmstead. In Arizona, the first homes entered in the improvement project are getting special attention from county and State staff members so that they can be used as demonstrations to carry the teaching further.

Landscaping and home-beautification demonstrations were given by home demonstration agents in 130 Texas counties. Nearly 30,000 farm people attended the demonstrations.

Members of 4-H Clubs raised more than 100,000 acres of garden products for home and market use. An equal number did outstanding work in beautifying their own home grounds in 4-H projects.

#### CHECKING DISEASE SAVES MILLIONS

Extension forces during the year were quick to demonstrate and get into use by farmers new disease-resistant plants developed by plant breeders. Soil often becomes so contaminated that sprays and dusts will not control diseases. Then the only answer is varieties immune to those diseases. Fusarium wilt drove the watermelon industry from Currituck and Chowan Counties, N. C., many years ago. With disease-resistant varieties, 1,500 acres of watermelons are now producing profitable crops in Chowan County.

Increased yield due to seed treatment of wheat, corn, oats, flax, and barley in Minnesota during the year has been estimated to be nearly



23 million bushels. Treatment of seed wheat against disease in Kansas alone brought estimated benefits of more than 30 million dollars. Several years ago, extension workers in Colorado started an intensive campaign to control stinking smut of wheat. Now 75 percent of the wheat growers practice control methods and have cut losses materially.

Through the use of peanut-seed treatment, North Carolina growers increased their profits by 1½ million dollars. Treatment of sugar beet seeds in Colorado resulted in a 10-percent increase in production from the seed treated and helped materially to fill the Nation's near-empty sugar bowl.

Massachusetts was one of the States where Extension offered intensive spray-service programs for fruit growers. Through the press and radio, timely information was released twice weekly.

#### INSECT CONTROL AN IMPORTANT TASK

Extension entomologists, working with county extension workers, found farmers confused about new insecticides and fungicides. "Does DDT kill the flies or the dandelions?" "Do I spray my calf with 2, 4-D to kill the grubs?" Too often these and similar questions were asked. Providing authentic information on many new insecticides on the market turned out to be one of the main jobs.

But new insecticides, when properly used, solved many of rural America's insect problems. In Alabama, 41,000 farmers protected 175,000 acres of cotton from insects at a saving of more than 6 million dollars. Cottonfields on which insect control methods were used produced 228 more pounds of seed cotton to the acre than untreated fields.

State-wide fly-control programs were effective in many States. Idaho furnished an example. Extension organized, the program was aided by schools, farm groups, county and city health-service officials, and civic organizations. Demonstrations conducted totaled 230. So effective was the program that by public demand it was repeated in 1947.

Malaria control, livestock-pest control, field-insect elimination, and other programs saved money in many States.

Extension Service recommendations in connection with the DDT application program in Pennsylvania resulted in a 6-million-dollar net gain to producers of 138,000 acres of potatoes.

#### FARMERS PRODUCE MUCH LUMBER

Farm forestry is of major importance in many States. Farmers own 166 million acres of woodland that produces one-third of the Nation's forest products. Along with being a source of cash income, farm woodlands provide many important products for farm use such as fuel, fence posts, and lumber for farm buildings.

All but four States have extension foresters to help county extension workers with advice and practical assistance to farm families on woodland management, reforestation, marketing, and wood preservation. The great demand for timber to meet today's need for lumber could result in stripping our farm forests. Only practical woodland management can prevent this.

In a number of States, as in Idaho, Alabama, California, and Georgia, farmers showed interest in treating potato-cellar timbers, lumber, and fence posts with preservatives. Extension provided the informa-



tion and demonstration of the methods. Arkansas, Indiana, Louisiana, and other States held forestry training camps for farm youth.

Extension foresters in half of the States took a leading part on State committees for rural fire-control work. Extension agents helped to organize forest-fire detecting and fighting operations in some regions.

Community forests have become popular. In 1940 the town of Troy in Maine set aside 963 acres of abandoned farm land and wood lots as a town forest. This was after the county agent and extension forester, in a land-use survey, decided the land, abandoned for taxes, was best suited for tree planting. Two hundred thousand trees, mostly pine and spruce, were planted. Already the forest has returned to the town a new profit double the amount it could have received in taxes. It has also provided labor for many. Profits amounting to \$4,000 have been set aside to help replace a much-needed consolidated school building.

### MILLIONS OF HOMEMAKERS SERVED

More than 3 million rural homemakers changed to better homemaking practices because of extension teachings. Membership in home demonstration clubs or groups continued to increase until at the close of the year it reached 1,162,000. The number of groups was over 50,000. But home economics extension work did not stop with members. More than 60 percent of the homemakers influenced by extension teaching were not members of the groups.

Home demonstration agents made nearly a million home visits and held more than 34,000 adult leader-training meetings attended by 602,000 women. These leaders assisted rural women and 4-H Club girls with their programs. Altogether, 3¾ million women attended nearly a quarter million demonstrations of better homemaking methods. More than 400,000 volunteer adult leaders helped home demonstration agents with programs in the many communities.

Homemakers have always been interested in better rural living. Being responsible for the home, family living, and similar aspects of rural life, the farm wife was quick to reflect the change in attitude from more production to better living.

Extension found rural homemakers wanting more instruction in public problems and rural policies such as health and recreation facilities, rural electrification, conservation of resources that affect the general welfare, prevention and control of juvenile delinquency, and improvement of educational opportunities for youth. They were interested, too, in family financial planning, work simplification, consumer education, farm and home planning, and preparation of foods for freezing.

Labor saving was not for farmers alone; many ideas reached the kitchen. In Madison County, Miss., a Negro home agent gave 10 demonstrations that resulted in 272 Negro farm women adjusting tables to proper height for less tiresome working conditions.

Kansas Extension women set out to kill that old saying "A woman's work is never done." In 21 counties surveyed, more than 700 women developed one or more labor-saving practices right on their own farms. They improved work methods in gardening, washing cream separators, chicken feeding, washing and ironing clothes, dishwashing, preparing school lunches, and rearrangement of kitchen equipment.



## URBAN PEOPLE WANT HELP, TOO

Demands for home economics extension teaching are not confined to rural areas. There is a continuing request from women in urban centers for help in homemaking, gardening, and citizenship. During the year more than 2 million urban women were served by extension programs. Though limited personnel has prevented Extension from reaching far into the urban field, some States have employed extension agents to serve city people.

County home demonstration agents help with most activities of the cooperative Extension Service. They are directly responsible for the program for women, and in some States are responsible for the 4-H Club homemaking program for rural young people.

Home demonstration work with Negro families has grown steadily. In addition to assistance given by white extension workers, professional leadership was given by 389 Negro home demonstration agents, supervisors, and leaders. North Carolina added the first Negro home-management specialist to its staff.

The second National Home Demonstration Week was held May 4 to 11, 1947, to acquaint women throughout the Nation with the work and to obtain wider recognition of problems involved in family and community life. The press, radio, and farm-and-home publications cooperated extensively with this program.

Home-management specialists in many States, cooperating with agricultural engineers in the home building and remodeling program, helped county extension personnel answer the many requests from rural people. Advice on choice of materials and color schemes was given and other information was prepared. Many home-improvement meetings were held throughout the Nation. In Minnesota, 16,000 families in 39 counties were reached with such a program and 13,600 reported improvements.

Information on buying household equipment and furnishings was furnished to 200,000 rural families by home demonstration agents during the year.

The Ouachita Parish home demonstration agent in Louisiana gave 29 radio talks, issued 34 news articles, and sent out 3,600 circular letters with advice and suggestions concerning the purchase of new kitchen and household equipment. All information dealt not with trade names but with features to look for in purchasing new equipment.

## SCARCITIES DEVELOP SKILLS

Postwar scarcity of many articles needed in the home has encouraged farm women and 4-H Club girls to develop individual skills in producing items for home use. For many years the assistance sought in problems of upholstering, repairing, and refinishing furniture have increased and the program has been broadened.

Women and girls wanted to make handbags, belts, gloves, and other accessories. Some desired to make pottery, baskets, lamp shades, and similar household articles. The shortage of durable toys during the war resulted in women's making them at home. Some, especially the women, who developed such skills, found it possible to supplement the family income by making products for sale. Florida women alone reported \$43,935 from sales of handicraft articles.



In Puerto Rico, home demonstration agents taught 4-H Club young people how to make rag toys. One group presented the toys to children in orphanages and schools for the deaf.

#### CLOTHING PROBLEMS SOLVED

Although a fair supply of clothing and fabrics returned to the market during the year, the demand from rural areas grew for help with clothing and textile problems. Women and 4-H Club girls who learned to make or remodel clothing during the shortages of the war years, continued this work. Extension assisted 627,000 families to make or remodel clothing.

New fabrics and finishes, which came on the market after the war, stimulated many questions concerning their use and care. To help answer these questions, the Extension Service sponsored a refresher course for State extension clothing specialists. State specialists, after getting information on new fabrics, carried the training to home demonstration agents and local leaders.

Homemaking classes helped farm women and 4-H Club leaders to learn more about making clothes for their own family. It saved them money, too. In Jefferson County, Tenn., 19 members of a home-making class in tailoring estimated that they saved \$1,000 by making dresses, suits, and coats instead of buying them ready-made. These 19 women passed on useful hints and information on tailoring to 62 neighbors who made 65 garments.

Farm women and girls through Extension received instructions in sewing practices, selection of clothing, selection of textiles, care of clothing, sewing-machine adjustment and care. In Los Angeles County, Calif., tailoring classes for 4-H Club local leaders and older girls were popular and beneficial.

Training local leaders to carry information to their neighbors has been an essential part of the clothing program. A home demonstration agent in California reports that by planning and using local leaders, she was able to help twice as many people with their clothing problems.

#### BALANCED DIETS GET MORE ATTENTION

"Happy and healthy is the family that is well fed" is often said, but sometimes this is true, sometimes not. Rural women long ago learned that setting a good table is important when a group of hungry men and growing boys and girls appears at each meal. But, today, farm women are thinking more about good nutrition than about just "filling them up." Nutrition-study findings, when presented to farm women and girls, have resulted in a desire to learn more about family needs and provide the proper amounts of the right kind of food.

Providing a year-round supply of fruits and vegetables for the family has long been the farm homemaker's chore. But, today, with half of the farm families having freezer lockers available and more getting them every month, methods have changed. Home agents and nutrition specialists found that the prevailing request during the year was for information about preparing food for freezer lockers.

Rural people have put increased pressure on county extension workers for more information about meat-freezing methods. They have also made many requests for advice on the purchasing of home-freezing equipment. Bulletins, leaflets, and meetings were Exten-



sion's effort to answer the many questions. More than a million State and United States Department of Agriculture bulletins on freezing were distributed during the year.

Although freezing is the current interest, curing of pork is not becoming a lost art. Demand for information on curing of pork continues. West Virginia revived its 4-H Club ham and bacon show. Forty county winners competed in a State-wide show, which brought renewed interest in home curing of meat products.

Almost 2 million families participated in some phase of food preservation under Extension's direction. Extension specialists from 34 States and the United States Department of Agriculture held a home food preservation research conference in December 1946 to gain the latest information to carry back to farm women.

#### HOT-LUNCH PROGRAMS AIDED

Health improvement through nutrition has been stressed. This was particularly true of the aid given farm women and 4-H Club girls in school-lunch-preparation programs. Extension assisted 17,000 schools with hot-lunch programs.

Changing times were reflected in the postwar program. An urge for hospitality as a release from wartime routine showed itself in requests for food demonstrations for many kinds of company occasions. Illinois reports holding 454 meetings with 8,000 in attendance.

Maine conducted food forums in every county. Delegates included school superintendents, welfare workers, and nurses from community organizations. The food specialist discussed Selective Service figures for Maine draftees and reported the work done by the Maine Experiment Station on diets for school children. Slides showed pictures of well-fed and poorly nourished children.

After these presentations visitors were divided into discussion units of 8 to 10 persons. These suggestions resulted: Set up more school-lunch programs; serve milk and fruit juice daily when no school-lunch program is possible; hold more clinics, especially dental; provide food and health information for young mothers; organize health work; and provide more school nurses.

As an aftermath of the war, interest in legal matters became more important to rural women. Inheritance, wills, and other legal problems brought about home extension programs to answer the questions. In Wisconsin, meetings were arranged where lawyers and judges explained such things as titles to real estate, beneficiaries of bonds, insurance, and wills. More than half of the thousand families represented at the meetings made changes in legal papers because they had previously been misinformed or lacked knowledge concerning the laws.

A recent committee report by a group studying the scope of Extension's responsibility said in part: "The Extension Service has reached a transition period in its development. Its record of educational services rendered to date is highly commendable. It cannot, however, rest on laurels previously won and maintain its record as a progressive and productive educational institution."

#### EXTENSION STUDIES ITS OWN WORK

Since 1923 Extension has been studying its own work. Surveys are made to gain important information that helps extension workers



to teach more effectively. They find out by direct contact how farm people gain useful knowledge, how much of this information they use, and with what results. These facts help extension workers to choose the best method of reaching farm people and to learn what farm people want.

During the year studies were made to evaluate extension teaching in many different States. Training programs were conducted to inform new personnel of improved methods of adult teaching, as well as to influence youth effectively in the 4-H Club program.

Studies were also made of the effectiveness of different State and Federal publications in teaching farmers and homemakers. Much attention was given to making publications more readable—simple enough for the average farmer or homemaker to understand.

Cold statistics, such as numbers of farms visited, people influenced, telephone calls answered, are always impressive in reports. But they do not fully explain the influence extension personalities have upon the people with whom they work.

A recent Vermont survey, made by an agency independent of the Extension Service, shows that 8 of 10 farmers know about their county agent and half of them have had dealings with him. All those who have had dealings with the agents say they got good ideas from them. Nine out of ten said the agents' work and advice were helpful. Almost 7 in 10 farmers praised the Extension Service as a medium through which information is channeled to farmers.

Rural people get most of their education in farm safety and fire prevention through extension workers. National Farm Safety Week each July is the time when they are reminded that farming is the most dangerous of all large industries. Fire prevention on farms likewise is stressed during National Fire Prevention Week. County extension personnel devoted much time to farm and home safety throughout the entire year.

Some States had full-time fire-prevention and farm-safety specialists who helped county staffs organize programs in their counties. Many counties organized effective rural fire-fighting forces. Much of the safety and fire-prevention work was accomplished through the 4-H Clubs and the home demonstration groups. During the past year more than 400,000 4-H Club members received training in safety and fire prevention. Nearly 520,000 farm families were assisted by Extension in removing fire and accident hazards.

#### NEWSPAPERS, RADIO, AND FARM PRESS HELP

Farmers and homemakers gain information in many ways. Newspapers, radio, and the farm press are among the important channels of distribution of extension information. Federal and State bulletins are also valuable.

During 1946 county extension offices distributed a total of nearly 18 million bulletins on farming and homemaking. In addition, many were distributed by State extension workers and offices. County extension workers supplied more than three-quarters of a million news articles or stories and participated in 47,000 radio broadcasts.

Through State extension editors much information is passed from the United States Department of Agriculture to the newspapers, radio stations, and farm papers of the State. The editors also furnish



county extension staffs with information for news and radio releases. County workers in most States obtain, through State information offices, motion pictures and slide films for educational meetings, charts and posters for demonstrations and meetings, and other training aids.

A survey in Ward County, N. Dak., showed that one-third of the farm people listened to the county agent and home demonstration agent each time they broadcast their weekly programs. More than 10 percent of the listeners said that they took action on recommendations made by these extension workers.

An outstanding example of planning and executing a campaign of information was New York's six-point "more fall milk" production program. With financial support from the milk industry, the Extension Service used every medium available to get information to farm families. A series of form letters went out from each county agent. Milk companies distributed leaflets along with cream checks. News stories and advertisements, posters, radio briefs, and programs were used effectively. Exhibits were used in store windows. A 45-minute colored sound film was produced and shown effectively. Results were so outstanding that a similar program was planned for 1947.

In New Mexico much of the extension work is with Spanish-American people. Those who take full advantage of every educational opportunity offered through the county extension agents serve as examples for those with less education or ingenuity. County agricultural agents made full use of these men and women as leaders, and through them were able to reach many more than with a direct approach. In New Mexico the county extension worker must be able to make radio talks in Spanish as well as English. Otherwise many of those who need the knowledge would go without it.

### CITIZENSHIP DEVELOPED

County extension work reaches most of the counties of our Nation, practically every county with any agriculture. These extension workers, technically trained but practical, leave a lasting influence with the people with whom they advise.

4-H Club boys and girls will grow into better citizens, rural or urban, because of the influence their county extension agent has had upon them, whether they spend 1 year or 5 with the program.

Farm homes are building finer families because of the influence home demonstration agents have had in making rural homes better. Farmers are becoming more businesslike and accepting new ideas of better farming methods because of the association with trained county agricultural agents.

The cooperative Extension Service is aware of the responsibility it shares with rural America in this movement toward better rural living.

### STATISTICS

The new Federal funds, together with a \$5,336,979 increase in State and local appropriations for Extension, give a total of about \$59,500,000 from all sources for cooperative extension work during the year beginning July 1, 1947. Of this amount 52 percent is State and local funds and 48 percent is Federal funds. That compares with total regular appropriations for the year ending June 30, 1947, of about \$54,000,000, of which 52.4 percent came from Federal and 47.6 percent

from State sources. No funds were withheld from the States during the year for failure to comply with the requirements set down by Congress.

TABLE 1.—*Number of counties with county extension agents, July 1, 1915, 1925, 1935, and 1947, and total number of extension workers, July 1, 1947*

State	Num- ber of agricul- tural coun- ties in State	Counties with agents on July 1—								Total exten- sion workers July 1, 1947
		1915		1925		1935		1947		
		County agricul- tural	Home demon- stration	County agricul- tural	Home demon- stration	County agricul- tural	Home demon- stration	County agricul- tural	Home demon- stration	
Alabama.....	67	67	19	59	37	67	44	67	67	426
Arizona.....	14	3	-----	12	9	11	6	12	<sup>1</sup> 9	40
Arkansas.....	75	52	20	50	39	75	72	75	75	283
California.....	56	11	-----	43	22	43	25	48	38	273
Colorado.....	63	13	-----	20	2	45	5	<sup>1</sup> 45	<sup>1</sup> 30	127
Connecticut.....	8	6	-----	8	7	8	8	8	8	72
Delaware.....	3	3	-----	3	-----	3	3	3	3	28
Florida.....	63	36	27	36	30	44	29	61	40	188
Georgia.....	159	81	48	121	61	155	80	153	115	463
Idaho.....	44	3	-----	16	27	31	37	37	<sup>1</sup> 21	86
Illinois.....	102	18	-----	95	21	97	39	<sup>1</sup> 102	<sup>1</sup> 88	322
Indiana.....	92	31	-----	79	1	91	12	92	62	275
Iowa.....	99	11	-----	99	15	99	35	98	66	379
Kansas.....	105	39	-----	63	15	100	27	103	62	274
Kentucky.....	120	39	19	72	24	114	29	119	<sup>1</sup> 78	321
Louisiana.....	64	43	13	48	24	62	52	64	64	316
Maine.....	16	3	-----	16	15	16	15	<sup>1</sup> 16	<sup>1</sup> 16	69
Maryland.....	23	13	6	23	19	23	23	23	22	121
Massachusetts.....	12	10	-----	11	11	11	10	11	11	106
Michigan.....	83	17	-----	57	5	73	5	<sup>1</sup> 83	<sup>1</sup> 52	267
Minnesota.....	87	23	-----	58	8	86	11	87	50	284
Mississippi.....	82	49	33	54	44	79	69	82	77	439
Missouri.....	114	15	-----	50	9	114	14	114	94	392
Montana.....	56	8	-----	23	6	40	8	<sup>1</sup> 47	20	99
Nebraska.....	93	8	-----	43	2	93	14	<sup>1</sup> 83	<sup>1</sup> 32	182
Nevada.....	16	-----	-----	8	9	14	6	<sup>1</sup> 13	<sup>1</sup> 12	36
New Hampshire.....	10	5	-----	10	8	10	10	10	10	64
New Jersey.....	20	7	-----	18	11	19	15	20	17	103
New Mexico.....	31	8	-----	21	5	24	10	30	<sup>1</sup> 20	81
New York.....	56	29	-----	55	38	51	37	56	51	410
North Carolina.....	100	64	34	74	49	97	53	99	100	564
North Dakota.....	53	15	-----	33	1	53	4	51	14	106
Ohio.....	88	10	-----	85	15	84	22	88	69	264
Oklahoma.....	77	56	24	65	44	77	68	77	77	307
Oregon.....	36	12	-----	28	3	34	6	36	27	159
Pennsylvania.....	67	14	-----	63	28	65	63	66	66	264
Rhode Island.....	5	-----	-----	5	2	5	5	<sup>1</sup> 5	<sup>1</sup> 5	24
South Carolina.....	46	43	24	40	38	46	46	46	46	269
South Dakota.....	68	5	-----	34	32	69	27	<sup>1</sup> 54	<sup>1</sup> 30	116
Tennessee.....	95	38	24	50	26	95	42	95	85	388
Texas.....	254	99	27	155	88	235	151	<sup>1</sup> 249	<sup>1</sup> 191	691
Utah.....	29	10	-----	18	11	21	8	<sup>1</sup> 28	25	90
Vermont.....	14	9	-----	12	7	14	11	14	11	63
Virginia.....	99	55	22	65	35	93	42	99	83	364
Washington.....	39	10	-----	26	5	38	8	39	33	142
West Virginia.....	55	27	10	36	15	44	27	49	36	196
Wisconsin.....	71 <sup>1</sup>	12	-----	48	1	65	7	70	63	259
Wyoming.....	23	6	-----	16	5	20	7	22	15	68
Alaska.....	4	-----	-----	-----	-----	-----	-----	1	2	7
Hawaii.....	5	-----	-----	-----	-----	4	4	4	4	70
Puerto Rico.....	36	-----	-----	-----	-----	-----	-----	36	33	120
Total.....	3,097	1,136	350	2,124	929	2,857	1,351	2,990	2,325	11,057

<sup>1</sup> Some agents cover 2 or more counties.



TABLE 2.—Expenditures of funds <sup>1</sup> from all sources for cooperative agricultural extension work in States, Alaska, Hawaii, and Puerto Rico, for the fiscal year ended June 30, 1946, by sources of funds, and totals for 1941-45

State or Territory	Grand total	Total Federal funds	Total within the State	Funds from Federal sources					Funds from within State			
				U. S. Department of Agriculture		Smith-Lever and Bankhead-Jones	Capper-Ketcham	Additional cooperative	Bankhead-Flannagan	State and college	County	Farmers' organizations, etc.
				Clarke-McNary	Norris-Doxey							
Alabama-----	\$1,542,384.80	\$816,491.12	\$725,893.68	-----	-----	\$654,071.94	\$37,220.03	\$3,724.15	\$121,475.00	\$356,886.80	\$366,292.09	\$2,714.79
Arizona-----	197,615.36	127,710.78	69,904.58	-----	-----	94,410.17	22,833.22	-----	10,467.39	36,441.43	33,463.15	-----
Arkansas-----	1,059,358.91	693,843.29	365,515.62	-----	\$1,620.00	538,543.78	33,217.36	6,949.16	113,512.99	259,075.98	106,439.64	-----
California-----	1,399,376.68	529,574.93	869,801.75	\$1,620.00	-----	414,446.82	37,464.80	-----	76,043.31	533,311.68	336,490.07	-----
Colorado-----	498,163.23	280,346.09	217,817.14	105.00	-----	158,977.29	24,638.47	27,395.83	69,229.50	92,500.00	125,317.14	-----
Connecticut-----	345,094.96	144,573.30	200,521.66	1,539.00	-----	106,862.40	24,672.42	-----	11,499.48	122,855.65	58,000.00	19,666.01
Delaware-----	97,033.70	77,231.66	19,802.04	-----	-----	47,978.98	21,106.82	-----	8,145.86	18,353.81	1,448.23	-----
Florida-----	623,462.41	269,036.45	354,425.96	1,620.00	-----	200,645.82	27,417.72	-----	39,352.91	143,666.76	210,759.20	-----
Georgia-----	1,439,056.36	890,512.15	548,544.21	540.00	1,620.00	659,224.83	37,854.95	26,432.70	164,839.67	234,376.70	314,167.51	-----
Idaho-----	334,260.44	196,686.83	137,573.61	1,939.98	105.00	122,353.56	23,032.55	3,445.51	45,810.23	50,402.40	87,171.21	-----
Illinois-----	1,584,967.37	633,669.16	951,298.21	1,620.00	1,620.00	501,753.79	36,471.46	8,927.39	83,276.52	238,004.29	10,387.00	702,906.92
Indiana-----	1,470,255.75	534,303.88	935,951.87	1,620.00	-----	433,550.93	33,414.27	-----	65,718.68	453,024.80	406,466.03	76,461.04
Iowa-----	1,668,428.39	651,074.24	1,017,354.15	2,100.00	1,134.00	468,515.29	32,664.80	28,020.63	118,639.52	264,363.36	391,090.54	361,900.25
Kansas-----	1,161,220.80	474,166.21	687,054.59	-----	765.00	321,698.99	29,120.22	50,228.73	72,353.27	125,762.83	478,194.74	83,097.02
Kentucky-----	1,230,805.14	833,049.59	397,755.55	1,950.00	-----	625,981.53	37,387.96	-----	167,730.10	170,500.00	227,255.55	-----
Louisiana-----	1,170,130.26	578,690.52	591,439.74	1,393.60	-----	435,848.30	32,049.90	-----	109,398.72	455,992.56	131,987.18	3,460.00
Maine-----	304,544.30	182,635.58	121,908.72	1,620.00	-----	129,431.86	24,391.36	2,216.53	24,975.83	53,825.40	51,669.15	16,414.17
Maryland-----	478,788.23	230,372.15	248,416.08	-----	1,619.94	171,298.96	26,453.25	-----	31,000.00	136,516.20	111,899.88	-----
Massachusetts-----	563,563.41	137,844.09	425,719.32	1,620.00	-----	102,164.68	23,982.65	-----	10,076.76	140,956.18	284,763.14	-----
Michigan-----	1,131,251.82	588,634.40	542,617.42	1,620.00	-----	471,836.40	35,688.96	-----	77,869.04	436,102.81	106,514.61	-----
Minnesota-----	1,011,615.28	570,410.73	441,204.55	1,620.00	549.99	452,356.13	32,213.31	-----	83,671.30	183,780.80	244,676.09	12,747.66
Mississippi-----	1,524,240.77	876,738.85	647,501.92	1,608.00	1,584.00	659,454.04	35,250.62	-----	178,842.19	308,919.58	334,923.34	3,659.00
Missouri-----	1,079,738.11	767,580.25	312,157.86	1,093.50	555.00	564,917.54	35,886.93	1,686.98	163,440.30	177,500.00	134,657.86	-----
Montana-----	418,403.44	198,459.51	219,943.93	1,260.00	-----	118,162.50	23,030.42	32,217.74	23,788.85	61,062.09	158,881.84	-----
Nebraska-----	749,524.06	406,240.87	343,283.19	1,620.00	-----	266,393.57	26,982.76	49,781.81	61,462.73	149,974.50	185,908.24	7,400.45
Nevada-----	212,402.63	96,253.59	116,149.04	-----	1,200.00	40,493.58	20,583.19	11,955.08	22,021.74	63,077.20	53,071.84	-----
New Hampshire-----	263,439.27	106,801.26	156,638.01	1,530.00	-----	70,238.64	21,814.30	1,134.54	12,083.78	80,583.37	76,054.64	-----
New Jersey-----	567,754.59	192,683.31	375,071.28	1,620.00	-----	136,209.13	26,666.64	8,153.60	20,033.94	136,902.67	230,704.33	7,464.28
New Mexico-----	370,947.14	210,251.59	160,695.55	-----	-----	119,523.81	23,095.71	-----	67,632.07	78,717.62	81,670.02	307.91
New York-----	2,317,611.06	590,111.13	1,727,499.93	1,620.00	1,620.00	456,203.82	40,148.61	-----	90,518.70	648,010.53	1,061,272.91	18,216.49

<sup>1</sup> War Food Administration and farm labor funds not included.

TABLE 2.—Expenditures of funds<sup>1</sup> from all sources for cooperative agricultural extension work in States, Alaska, Hawaii, and Puerto Rico for the fiscal year ended June 30, 1946, by sources of funds, and totals for 1941-45—Continued

State or Territory	Grand total	Total Federal funds	Total within the State	Funds from Federal sources					Funds from within States			
				U. S. Department of Agriculture		Smith-Lever and Bankhead-Jones	Capper-Ketcham	Additional cooperative	Bankhead-Flannagan	State and college	County	Farmers' organizations, etc.
				Clarke-McNary	Norris-Doxey							
North Carolina	2,051,278.49	1,040,224.09	1,011,054.40	1,620.00	1,012.50	812,167.22	42,624.01		182,800.36	378,569.09	632,485.31	
North Dakota	473,562.52	318,448.93	155,113.59	1,620.00		184,334.82	24,442.25	38,705.53	69,346.33	27,433.76	127,679.83	
Ohio	1,337,321.82	730,442.45	606,879.37	1,620.00		582,847.26	39,986.40		105,988.79	339,416.55	267,462.82	
Oklahoma	1,133,099.91	672,612.73	460,487.18		1,620.00	468,370.35	32,688.61	51,344.98	118,588.79	329,162.14	131,325.04	
Oregon	790,870.75	242,376.85	548,493.90	1,620.00		162,916.56	24,860.31		52,979.98	377,563.82	170,930.08	
Pennsylvania	1,204,893.60	709,133.89	495,759.71	1,260.00		581,610.09	48,859.18		77,404.62	365,759.71	130,000.00	
Rhode Island	82,292.51	54,342.33	27,950.18			34,191.52	18,948.69		1,202.12	13,277.27	12,600.00	2,072.91
South Carolina	995,491.77	617,067.07	378,424.70	1,720.00	1,720.00	461,957.51	32,487.60	2,352.22	116,829.74	325,000.00	51,724.70	1,700.00
South Dakota	463,712.28	323,544.92	140,167.36		945.00	175,125.28	24,223.30	59,839.87	63,411.47	81,000.00	59,167.36	
Tennessee	1,247,754.72	798,278.27	449,476.45	1,620.00		623,494.36	36,450.19		136,713.72	258,000.00	187,346.45	4,130.00
Texas	2,378,774.34	1,325,696.08	1,053,078.26	1,620.00		1,056,695.90	50,515.24	82,238.79	134,626.15	366,329.65	683,887.10	2,861.51
Utah	305,503.32	172,689.66	132,813.66	1,260.00		85,130.44	22,132.38	13,607.42	50,559.42	82,192.66	50,621.00	
Vermont	239,019.95	132,126.30	106,893.65			85,171.59	22,055.51	5,453.81	19,445.39	57,622.43	38,494.40	10,776.82
Virginia	1,308,431.25	671,076.56	637,354.69	1,620.00	873.00	508,488.43	35,095.44		124,999.69	447,619.83	189,734.86	
Washington	641,559.80	301,463.98	340,095.82	382.50		210,598.38	27,091.95		63,391.15	156,544.88	183,550.94	
West Virginia	674,087.35	412,750.60	261,336.75		1,620.00	319,286.65	31,605.61		60,238.34	196,448.77	61,018.02	3,869.96
Wisconsin	1,262,417.23	600,864.75	661,552.48	1,623.00		447,872.15	32,703.17	1,214.93	117,454.50	205,076.43	415,476.05	41,000.00
Wyoming	266,452.19	146,030.63	120,421.56	1,260.00		67,441.38	21,368.92	19,571.91	36,388.42	57,671.46	62,750.10	
Alaska	32,416.54	23,950.00	8,466.54			13,950.00	10,000.00			8,466.54		
Hawaii	334,383.68	152,640.84	181,742.84			88,094.83	21,385.77	16,590.65	26,569.59	181,291.79		451.05
Puerto Rico	531,543.41	244,932.74	286,610.67	1,620.00		243,312.74				286,610.67		
Total	44,570,306.10	22,576,671.18	21,993,634.92	53,341.58	23,403.43	16,756,606.54	1,486,280.19	553,190.49	3,703,848.95	10,752,505.45	9,857,851.23	1,383,278.24
1945	38,171,919.65	18,779,197.58	19,392,722.07	49,416.00	20,368.44	16,676,879.43	1,484,519.30	548,014.41		8,965,253.00	9,117,304.33	1,310,164.74
1944	36,344,028.66	18,782,976.75	17,561,051.91	47,709.68	19,661.26	16,678,434.72	1,485,908.29	551,262.80		8,127,065.77	8,266,940.04	1,167,046.10
1943	34,988,131.46	18,799,715.56	16,188,415.90	53,182.08	24,902.31	16,683,768.54	1,489,653.88	548,208.75		7,415,254.10	7,769,155.79	1,004,006.01
1942	34,474,580.36	18,868,789.90	15,605,790.46	56,214.56	32,608.10	16,743,755.96	1,489,051.97	547,159.31		7,016,210.64	7,477,325.58	1,112,254.24
1941	33,464,948.69	18,574,796.28	14,890,152.41	57,527.65	32,590.50	16,791,686.21	1,489,991.92	203,000.00		6,638,008.75	7,183,728.00	1,068,415.66

<sup>1</sup> War Food Administration and farm labor funds not included.



TABLE 3.—Expenditures of funds <sup>1</sup> from all sources for cooperative extension work for fiscal year 1945-46 for States, Alaska, Hawaii, and Puerto Rico

State	Administration		Printing and distribution of publications		Specialists	County agent work				Home demonstration work			
						Supervisory		In county		Supervisory		In county	
	Dollars	Per-cent	Dollars	Per-cent	Dollars	Dollars	Per-cent	Dollars	Per-cent	Dollars	Per-cent	Dollars	Per-cent
Connecticut-----	12,627.47	3.6	8,424.88	2.5	101,732.88	3,785.02	1.1	90,746.06	26.3	4,158.75	1.2	45,280.41	13.1
Delaware-----	10,626.27	11.0	931.60	1.0	29,632.56	5,059.27	5.2	21.7	21.7	4,199.07	4.3	11,881.33	12.2
Maine-----	30,408.16	10.0	3,618.96	1.2	63,908.69	6,714.92	2.2	85,226.43	28.0	8,087.49	2.7	59,655.38	19.6
Maryland-----	15,681.30	3.3	7,057.46	1.5	122,157.33	11,996.61	2.5	177,094.69	37.0	18,388.96	3.8	104,731.31	21.8
Massachusetts-----	16,680.79	3.0	5,273.57	.9	154,548.81	8,649.55	1.5	136,963.56	24.3	10,366.39	1.9	93,132.29	16.5
New Hampshire-----	20,548.64	7.8	7,197.80	2.7	62,128.36	1,493.65	.5	56,716.87	21.5	5,218.48	2.0	48,400.21	18.4
New Jersey-----	13,473.03	2.4	3,961.81	.7	118,263.48	12,796.55	2.2	191,343.99	33.7	9,425.35	1.7	107,964.88	19.0
New York-----	149,850.84	6.5	38,077.51	1.6	546,964.15	30,354.45	1.3	694,843.66	30.0	46,343.39	2.0	341,430.37	14.7
Pennsylvania-----	72,036.04	6.0	12,318.15	1.0	309,786.46	14,132.29	1.2	504,907.19	41.9	18,817.67	1.5	234,662.40	19.5
Rhode Island-----	6,994.28	8.5	1,133.00	1.4	20,466.49	1,309.79	1.6	14,237.37	17.3	4,471.67	5.4	11,901.85	14.5
Vermont-----	16,595.09	6.9	7,263.91	3.0	55,140.23	7,143.63	3.0	53,073.59	22.2	5,087.49	2.1	42,986.74	18.0
West Virginia-----	21,353.96	3.2	7,275.21	1.1	115,603.21	22,393.53	3.3	242,175.87	35.9	19,658.13	2.9	119,281.90	17.7
Total-----	386,875.87	5.4	102,533.86	1.4	1,700,372.65	125,829.26	1.8	2,268,348.43	31.8	154,222.84	2.2	1,221,309.07	17.1
Alabama-----	46,933.13	3.0	22,935.31	1.5	198,825.30	85,153.72	5.5	660,759.82	42.8	73,932.67	4.8	427,992.35	27.8
Arkansas-----	46,676.66	4.4	8,132.83	.8	112,485.60	49,136.03	4.6	421,501.93	39.8	47,242.02	4.5	367,395.42	34.7
Florida-----	15,932.96	2.6	9,083.09	1.4	57,048.63	26,132.84	4.2	302,784.33	48.6	31,800.58	5.1	166,630.06	26.7
Georgia-----	19,615.94	1.4	23,065.75	1.6	177,645.16	62,100.96	4.3	729,550.77	50.7	52,220.17	3.6	341,905.94	23.8
Kentucky-----	24,367.71	2.0	11,472.63	.9	141,749.26	59,632.26	4.9	646,090.94	52.5	31,090.67	2.5	262,145.58	21.3
Louisiana-----	15,486.81	1.3	5,343.05	.4	172,930.70	44,854.08	3.9	497,476.06	42.5	41,079.35	3.5	374,047.61	32.0
Mississippi-----	43,195.94	2.8	11,292.87	.7	232,972.20	55,502.13	3.7	652,798.45	42.8	47,790.25	3.1	441,427.73	29.0
North Carolina-----	35,782.20	1.7	17,503.95	.8	235,351.84	51,014.12	2.5	986,216.68	48.1	57,957.68	2.9	574,606.81	28.0
Oklahoma-----	21,761.63	1.9	13,927.03	1.2	161,701.38	45,512.85	4.0	445,778.52	39.4	42,946.76	3.8	384,441.01	33.9
South Carolina-----	47,173.66	4.8	12,138.79	1.2	230,990.19	52,099.37	5.2	367,663.35	36.9	32,267.42	3.2	229,393.27	23.1
Tennessee-----	34,903.97	2.8	9,677.72	.8	215,045.35	74,154.30	6.0	471,813.85	37.8	38,299.51	3.1	363,420.31	29.1
Texas-----	61,717.10	2.6	32,176.79	1.4	238,989.01	122,065.45	5.1	1,093,293.13	46.0	118,080.92	5.0	698,501.24	29.3
Virginia-----	46,210.02	3.5	17,424.40	1.3	189,967.00	47,142.79	3.6	635,249.79	48.6	47,173.57	3.6	311,327.85	23.8
Total-----	459,757.73	2.6	194,174.21	1.1	2,365,701.62	774,500.90	4.4	7,910,977.62	44.7	661,881.57	3.7	4,943,235.18	27.9
Illinois-----	55,866.24	3.5	18,010.69	1.1	230,499.71	35,474.64	2.2	729,573.40	46.0	41,216.40	2.6	389,288.42	24.6
Indiana-----	53,630.48	3.7	8,786.19	.6	254,501.90	26,338.07	1.8	737,938.08	50.2	15,221.26	1.0	182,705.13	12.4
Iowa-----	49,999.13	3.0	72,394.05	4.3	361,764.08	42,272.76	2.5	710,822.03	42.6	19,132.31	1.2	322,986.75	19.3
Kansas-----	39,190.27	3.4	20,042.71	1.7	249,320.48	25,789.80	2.2	560,692.16	48.3	20,565.76	1.8	176,314.82	15.2
Michigan-----	23,177.36	2.1	23,655.23	2.1	339,904.53	18,721.43	1.6	450,109.44	39.8	14,882.00	1.3	104,170.15	9.2
Minnesota-----	32,343.50	3.2	9,967.28	1.0	179,118.61	36,930.56	3.7	473,856.31	46.8	21,308.06	2.1	115,112.74	11.4
Missouri-----	21,944.23	2.0	8,422.97	.8	150,707.60	38,875.87	3.6	539,973.54	50.0	27,388.23	2.6	266,144.65	24.7
Nebraska-----	16,493.36	2.2	10,294.57	1.4	126,636.12	38,310.47	5.1	417,734.68	55.7	18,678.43	2.5	93,730.04	12.5
North Dakota-----	10,200.37	2.1	3,034.63	.6	94,508.82	40,348.04	8.5	249,563.92	52.7	9,584.31	2.1	43,960.95	9.3

<sup>1</sup> Does not include emergency war food or farm labor funds.

TABLE 3.—Expenditures of funds <sup>1</sup> from all sources for cooperative extension work for fiscal year 1945-46 for States, Alaska, Hawaii, and Puerto Rico—Continued

State	Administration		Printing and distribution of publications		Specialists		County agent work				Home demonstration work			
							Supervisory		In county	Per-cent	Supervisory		In county	Per-cent
	Dollars	Per-cent	Dollars	Per-cent	Dollars	Per-cent	Dollars	Per-cent	Dollars	Per-cent	Dollars	Per-cent	Dollars	Per-cent
Ohio-----	36,296.44	2.7	23,962.88	1.8	321,790.06	24.1	31,023.68	2.3	631,661.02	47.2	21,327.39	1.6	223,844.57	16.7
South Dakota-----	11,018.58	2.4	9,094.53	2.0	80,240.72	17.5	12,139.14	2.6	212,620.21	45.8	13,544.49	2.9	91,493.20	19.6
Wisconsin-----	26,898.82	2.1	46,319.24	3.7	343,396.01	27.2	30,833.18	2.5	570,140.92	45.2	21,950.92	1.7	174,075.67	13.8
Total-----	377,058.78	2.8	253,984.97	1.9	2,732,388.64	20.4	377,157.64	2.8	6,284,685.71	46.9	244,799.56	1.8	2,183,827.09	16.3
Arizona-----	14,100.57	7.1	2,699.81	1.4	24,443.23	12.4	6,422.97	3.3	102,330.59	51.8	6,561.37	3.3	34,735.09	17.5
California-----	15,498.51	1.1	-----	-----	219,975.04	15.7	43,238.55	3.1	813,161.09	58.1	31,471.48	2.2	246,799.31	17.6
Colorado-----	11,647.87	2.3	7,720.42	1.5	97,919.14	19.7	22,134.19	4.4	235,564.86	47.3	8,353.84	1.7	78,709.57	15.8
Idaho-----	15,623.17	4.7	2,726.67	.8	65,581.71	19.6	19,458.74	5.8	167,917.69	50.2	8,027.56	2.4	26,214.63	7.9
Montana-----	28,788.58	6.9	4,901.23	1.2	76,992.31	18.4	9,436.73	2.3	193,000.28	46.1	6,022.71	1.4	87,104.84	20.8
Nevada-----	12,713.05	6.0	-----	-----	26,780.52	12.6	24,595.36	11.6	89,442.08	42.1	8,739.06	4.1	47,302.56	22.3
New Mexico-----	15,121.41	4.1	3,526.25	.9	65,199.79	17.6	15,808.88	4.3	186,343.57	50.2	6,933.55	1.8	71,409.54	19.3
Oregon-----	45,485.08	5.7	12,445.28	1.6	174,556.81	22.1	14,971.65	1.9	304,710.04	38.5	7,511.09	.9	117,222.02	14.8
Utah-----	24,300.23	7.9	981.56	.3	59,855.67	19.6	6,809.00	2.2	134,926.76	44.2	8,517.59	2.8	58,971.67	19.3
Washington-----	14,790.90	2.3	13,484.01	2.1	88,412.05	13.8	41,306.73	6.4	325,466.33	50.7	24,278.37	3.8	121,834.82	19.0
Wyoming-----	12,677.68	4.8	1,385.45	.5	49,606.87	18.6	8,773.01	3.3	123,683.60	46.4	8,841.38	3.3	46,162.19	17.4
Total-----	210,747.05	3.9	49,870.68	.9	949,323.14	17.5	212,955.81	3.9	2,676,546.89	49.2	125,258.00	2.3	936,466.24	17.2
Alaska-----	6,455.70	19.9	718.25	2.2	-----	-----	942.64	2.9	5,564.48	17.2	4,949.72	15.3	7,654.57	23.6
Hawaii-----	26,306.27	7.9	5,687.00	1.7	83,226.62	24.9	7,223.87	2.2	122,541.61	36.6	5,565.00	1.6	78,867.85	23.6
Puerto Rico-----	39,000.81	7.3	2,705.48	.5	103,152.33	19.4	55,303.78	10.4	188,845.92	35.6	51,137.02	9.6	78,751.49	14.8
Grand total-----	1,506,202.21	3.4	609,674.45	1.3	7,934,165.00	17.8	1,553,913.90	3.5	19,457,510.66	43.7	1,247,813.71	2.8	9,450,111.49	21.2

<sup>1</sup> Does not include emergency war food or farm labor funds.



TABLE 3.—Expenditures of funds <sup>1</sup> from all sources for cooperative extension work for fiscal year 1945-46 for States, Alaska, Hawaii, and Puerto Rico—Continued

State	Boys' and girls' club work <sup>2</sup>			Total at college		Total in county		Miscellaneous		Total
	Supervisory		In county		Dollars	Per- cent	Dollars	Per- cent		
	Dollars	Per- cent	Dollars	Per- cent						
Connecticut-----	10,932.13	3.2	67,367.36	141,701.13	41.1	203,393.83	58.9	-----	-----	345,094.96
Delaware-----	3,100.78	3.2	10,583.67	53,549.55	55.2	43,484.15	44.8	-----	-----	97,033.70
Maine-----	9,285.27	3.0	37,639.00	122,023.49	40.1	182,520.81	59.9	-----	-----	304,544.30
Maryland-----	13,140.68	2.8	8,539.89	188,422.34	39.4	290,365.89	60.6	-----	-----	478,788.23
Massachusetts-----	26,087.40	4.6	111,861.05	221,606.51	39.3	341,956.90	60.7	-----	-----	563,563.41
New Hampshire-----	9,468.37	3.6	52,266.89	106,055.30	40.2	157,383.97	59.8	-----	-----	263,439.27
New Jersey-----	14,315.46	2.5	96,210.04	172,235.68	30.3	395,518.91	69.7	-----	-----	567,754.59
New York-----	49,248.30	2.1	420,498.39	860,838.64	37.1	1,456,772.42	62.9	-----	-----	2,317,611.06
Pennsylvania-----	38,233.40	3.2	-----	465,324.01	38.6	739,569.59	61.4	-----	-----	1,204,893.60
Rhode Island-----	6,791.58	8.2	14,986.48	41,166.81	50.0	41,125.70	50.0	-----	-----	82,292.51
Vermont-----	9,533.64	4.0	42,195.63	100,763.99	42.1	138,255.96	57.9	-----	-----	239,019.95
West Virginia-----	38,991.70	5.8	87,353.84	225,275.74	33.4	448,811.61	66.6	-----	-----	674,087.35
Total-----	229,128.71	3.2	949,502.24	2,698,963.19	37.8	4,439,159.74	62.2	-----	-----	7,138,122.93
Alabama-----	25,852.50	1.7	-----	453,632.63	29.4	1,088,752.17	70.6	-----	-----	1,542,384.80
Arkansas-----	6,788.42	.6	-----	270,461.56	25.5	788,897.35	74.5	-----	-----	1,059,358.91
Florida-----	14,049.92	2.2	-----	154,048.02	24.7	469,414.39	75.3	-----	-----	623,462.41
Georgia-----	32,951.67	2.3	-----	367,599.65	25.5	1,071,456.71	74.5	-----	-----	1,439,056.36
Kentucky-----	54,256.09	4.4	-----	322,568.62	26.2	908,236.52	73.8	-----	-----	1,230,805.14
Louisiana-----	18,912.60	1.6	-----	298,606.59	25.5	871,523.67	74.5	-----	-----	1,170,130.26
Mississippi-----	39,261.20	2.6	-----	430,014.59	28.2	1,094,226.18	71.8	-----	-----	1,524,240.77
North Carolina-----	19,479.99	.9	-----	417,089.78	20.3	1,560,823.49	76.1	3 73,365.22	3.6	2,051,278.49
Oklahoma-----	17,030.73	1.5	-----	302,880.38	26.7	830,219.53	73.3	-----	-----	1,133,099.91
South Carolina-----	18,441.63	1.9	5,324.09	393,111.06	39.5	602,380.71	60.5	-----	-----	995,491.77
Tennessee-----	40,439.71	3.2	-----	412,520.56	33.1	835,234.16	66.9	-----	-----	1,247,754.72
Texas-----	13,950.70	.6	-----	586,979.97	24.7	1,791,794.37	75.3	-----	-----	2,378,774.34
Virginia-----	13,935.83	1.1	-----	361,853.61	27.6	946,577.64	72.4	-----	-----	1,308,431.25
Total-----	315,350.99	1.8	5,324.09	4,771,367.02	27.0	12,859,536.89	72.6	73,365.22	.4	17,704,269.13
Illinois-----	47,187.06	3.0	37,850.81	428,254.74	27.0	1,156,712.63	73.0	-----	-----	1,584,967.37
Indiana-----	44,099.79	3.0	147,034.85	402,577.69	27.4	1,067,678.06	72.6	-----	-----	1,470,255.75
Iowa-----	16,662.19	1.0	72,395.09	562,224.52	33.7	1,106,203.87	66.3	-----	-----	1,668,428.39
Kansas-----	23,984.95	2.0	45,319.85	378,893.97	32.6	782,326.83	67.4	-----	-----	1,161,220.80
Michigan-----	52,607.39	4.7	104,024.29	472,947.94	41.8	658,303.88	58.2	-----	-----	1,131,251.82
Minnesota-----	38,544.49	3.8	104,433.73	318,212.50	31.5	693,402.78	68.5	-----	-----	1,011,615.28
Missouri-----	26,281.02	2.4	-----	273,619.92	25.3	806,118.19	74.7	-----	-----	1,079,738.11
Nebraska-----	27,646.39	3.7	-----	238,059.34	31.8	511,464.72	68.2	-----	-----	749,524.06
North Dakota-----	22,361.48	4.7	-----	180,037.65	38.0	293,524.87	62.0	-----	-----	473,562.52

See footnotes at end of table.

TABLE 3.—Expenditures of funds <sup>1</sup> from all sources for cooperative extension work for fiscal year 1945-46 for States, Alaska, Hawaii, and Puerto Rico—Continued

State	Boys' and girls' club work <sup>2</sup>			Total at college		Total in county		Miscellaneous		Total	
	Supervisory		In county	Total at college		Total in county		Miscellaneous			
	Dollars	Per- cent		Dollars	Per- cent	Dollars	Per- cent	Dollars	Per- cent		
Ohio.....	41,753.76	3.1	5,662.02	.5	476,154.21	35.6	861,167.61	64.4	-----	1,337,321.82	
South Dakota.....	33,561.41	7.2	-----	-----	159,598.87	34.6	304,113.41	65.4	-----	463,712.28	
Wisconsin.....	36,487.23	2.9	12,215.24	.9	505,985.40	40.1	756,431.83	59.9	-----	1,262,417.23	
Total.....	411,177.16	3.1	528,935.88	4.0	4,396,566.75	32.8	8,997,448.68	67.2	-----	13,394,015.43	
Arizona.....	6,321.73	3.2	-----	-----	60,549.68	30.7	137,065.68	69.3	-----	197,615.36	
California.....	24,538.22	1.8	4,694.48	.4	334,721.80	23.9	1,064,654.88	76.1	-----	1,399,376.68	
Colorado.....	13,371.56	2.7	22,741.78	4.6	161,147.02	32.3	337,016.21	67.7	-----	498,163.23	
Idaho.....	9,647.65	2.9	19,062.62	5.7	121,065.50	36.2	213,194.94	63.8	-----	334,260.44	
Montana.....	12,156.76	2.9	-----	-----	138,298.32	33.1	280,105.12	66.9	-----	418,403.44	
Nevada.....	2,830.00	1.3	-----	-----	75,657.99	35.6	136,744.64	64.4	-----	212,402.63	
New Mexico.....	6,604.15	1.8	-----	-----	113,194.03	30.5	257,753.11	69.5	-----	370,947.14	
Oregon.....	21,621.16	2.8	92,347.62	11.7	276,591.07	35.0	514,279.68	65.0	-----	790,870.75	
Utah.....	11,140.84	3.7	-----	-----	111,604.89	36.5	193,898.43	63.5	-----	305,503.32	
Washington.....	11,321.02	1.8	665.57	.1	193,593.08	30.2	447,966.72	69.8	-----	641,559.80	
Wyoming.....	15,322.01	5.7	-----	-----	96,606.40	36.2	169,845.79	63.8	-----	266,452.19	
Total.....	134,875.10	2.5	139,512.07	2.6	1,683,029.78	31.0	3,752,525.20	69.0	-----	5,435,554.98	
Alaska.....	4,448.26	13.7	1,682.92	5.2	17,514.57	54.0	14,901.97	46.0	-----	32,416.54	
Hawaii.....	4,965.46	1.5	-----	-----	132,974.22	39.8	201,409.46	60.2	-----	334,383.68	
Puerto Rico.....	12,646.58	2.4	-----	-----	263,946.00	49.6	267,597.41	50.4	-----	531,543.41	
Grand total.....	1,112,592.26	2.5	1,624,957.20	3.6	13,964,361.53	31.3	30,532,579.35	68.5	73,365.22	0.2	44,570,306.10

<sup>1</sup> Does not include emergency war food or farm labor funds.

<sup>2</sup> Does not include cost of extension workers who devoted part time to 4-H Club work. Estimated total expended for 4-H Club work, \$14,003,990.18.

<sup>3</sup> Emergency salaries.



TABLE 4.—Unexpended balance of Federal extension funds for the fiscal year ended June 30, 1946

State	Smith-Lever	Bankhead-Jones	Bankhead-Flannagan	Capper-Ketcham	Additional cooperative	Total	State	Smith-Lever	Bankhead-Jones	Bankhead-Flannagan	Capper-Ketcham	Additional cooperative	Total
Alabama			\$49,711.78			\$49,711.78	North Carolina			28,713.87			28,713.87
Arizona			16,422.61			16,422.61	North Dakota			2,452.75			2,452.75
Arkansas			28,361.17			28,361.17	Ohio		2,574.80	32,769.40			35,344.20
California			23,958.09			23,958.09	Oklahoma		197.77	39,194.16			197.77
Connecticut		\$257.59	8,609.43	\$127.55		8,994.57	Pennsylvania		14,316.53	2,303.93	1,573.59		53,510.69
Delaware		7,637.41	713.91			8,351.32	Rhode Island		6,320.67	5,758.78			10,198.19
Florida			14,552.48			14,552.48	South Dakota			25,869.88			5,758.78
Georgia		8,885.97	9,475.83			18,361.80	Tennessee						25,869.88
Idaho		5,356.09	16,010.54			21,366.63	Texas			140,626.31			140,626.31
Illinois		29,415.33	41,493.37	1,711.65	\$1,809.51	74,429.86	Utah			780.12			780.12
Indiana		30.47	38,339.35			38,369.82	Vermont			6,133.00			6,133.00
Kansas		1,327.49	5,006.82			6,334.31	Virginia	\$0.06		731.23			731.29
Louisiana			5,444.22			5,444.22	Washington			4,995.93			4,995.93
Maine			4,491.64			4,491.64	West Virginia			7,647.90	307.03		7,954.93
Maryland			306.71			306.71	Wisconsin		3,761.61	83.33			3,844.94
Massachusetts		13,467.54	8,686.90			22,154.44	Wyoming			12,902.28			12,902.28
Michigan			33,125.78			33,125.78	Puerto Rico		2.45				2.45
Minnesota		6,626.77	32,903.27			39,530.04	Refunds and unallotted			39,797.35			39,797.35
Missouri			3.00			3.00	Total	.06	102,053.46	706,151.05	3,719.82	1,809.51	813,733.90
Montana			3,150.70			3,150.70							
Nebraska			12,039.58			12,039.58							
New York		1,874.97	2,583.65			4,458.62							

TABLE 5.—Sources of funds allotted for cooperative extension work in States, Alaska, Hawaii, and Puerto Rico for the fiscal year ending June 30, 1948

State	Grand total	Total Federal funds	Total within the State	Funds from Federal sources							Funds from within the State		
				Smith-Lever	Bankhead-Jones, section 21, title II	Bankhead-Jones, section 23, title II	Capper-Ketcham	Additional cooperative	U. S. Dept. of Agriculture		State and college	County	Farmers' organizations, etc.
									Clarke-McNary	Norris-Doxey			
Alabama-----	\$1,783,447.50	\$1,039,447.50	\$744,000.00	\$151,596.66	\$502,475.28	\$342,811.38	\$37,220.03	\$3,724.15	-----	\$1,620	\$339,000.00	\$400,000.00	\$5,000.00
Arizona-----	341,050.41	176,455.41	164,595.00	33,296.96	61,113.21	59,212.02	22,833.22	-----	-----	-----	128,959.40	35,635.60	-----
Arkansas-----	1,405,679.26	864,441.47	541,237.79	118,683.61	419,860.17	284,111.17	33,217.36	6,949.16	-----	1,620	375,487.79	161,000.00	4,750.00
California-----	2,507,215.00	624,652.97	1,882,562.03	153,609.36	260,837.46	171,121.35	37,464.80	-----	\$1,620	-----	1,213,147.03	669,415.00	-----
Colorado-----	605,720.93	321,813.03	283,907.90	48,141.19	110,836.10	109,541.44	24,638.47	27,395.83	1,260	-----	150,000.00	125,076.90	8,831.00
Connecticut-----	432,152.94	160,291.94	271,861.00	49,469.04	57,650.95	26,751.99	24,799.96	-----	1,620	-----	200,265.00	59,596.00	12,000.00
Delaware-----	123,728.04	89,307.74	34,420.30	19,101.13	36,515.26	12,584.53	21,106.82	-----	-----	-----	28,420.30	6,000.00	-----
Florida-----	917,758.38	322,593.82	595,164.56	70,994.31	129,651.51	92,910.28	27,417.72	-----	1,620	-----	303,930.56	291,234.00	-----
Georgia-----	1,921,957.67	1,084,715.27	837,242.40	156,817.49	511,293.31	349,076.82	37,854.95	26,432.70	1,620	1,620	425,000.00	412,242.40	-----
Idaho-----	520,583.58	250,775.29	269,808.29	34,936.02	92,773.63	93,707.58	23,032.55	3,445.51	1,620	1,260	186,928.29	82,880.00	-----
Illinois-----	1,923,795.89	833,188.01	1,090,607.88	159,515.89	371,653.23	249,858.88	38,183.11	10,736.90	1,620	1,620	497,610.00	10,000.00	582,997.88
Indiana-----	1,606,132.86	676,997.86	929,135.00	120,302.76	313,278.64	208,382.19	33,414.27	-----	1,620	-----	524,665.00	403,510.00	960.00
Iowa-----	2,003,425.62	770,023.19	1,233,402.43	114,139.96	354,375.33	237,582.47	32,664.80	28,020.63	1,620	1,620	450,500.00	352,722.43	430,180.00
Kansas-----	1,550,739.96	558,913.46	991,826.50	84,993.69	238,032.79	154,918.03	29,120.22	50,228.73	-----	1,620	162,400.00	652,114.80	177,311.70
Kentucky-----	1,764,985.76	986,860.76	778,125.00	152,977.52	473,004.01	321,871.27	37,387.96	-----	1,620	-----	528,125.00	250,000.00	-----
Louisiana-----	1,527,298.62	687,482.46	839,816.16	109,083.79	326,764.51	217,964.26	32,049.90	-----	1,620	-----	694,285.86	145,530.30	-----
Maine-----	359,093.69	217,652.15	141,441.54	46,109.22	83,322.64	59,992.40	24,391.36	2,216.53	1,620	-----	104,951.07	36,490.47	-----
Maryland-----	659,647.11	262,065.69	397,581.42	63,063.69	108,235.27	62,693.48	26,453.25	-----	-----	1,620	286,227.42	111,354.00	-----
Massachusetts-----	720,654.58	178,810.17	541,844.41	42,748.46	72,883.76	37,575.30	23,982.65	-----	1,620	-----	169,876.00	371,968.41	-----
Michigan-----	1,609,703.88	733,038.88	876,665.00	139,007.00	332,829.40	222,273.52	35,688.96	-----	1,620	1,620	595,608.00	281,057.00	-----
Minnesota-----	1,263,912.55	727,883.49	536,029.06	110,427.47	348,555.43	233,447.28	32,213.31	-----	1,620	1,620	228,365.00	277,364.06	30,300.00
Mississippi-----	1,745,717.93	1,056,086.43	689,631.50	135,402.66	524,051.38	358,141.77	35,250.62	-----	1,620	1,620	300,500.00	375,791.50	13,340.00
Missouri-----	1,545,289.51	891,364.91	653,924.60	140,634.88	424,282.66	287,253.46	35,886.93	1,686.98	-----	1,620	307,500.00	274,041.06	72,383.54
Montana-----	630,351.06	259,967.16	370,383.90	34,918.54	83,243.96	84,936.50	23,030.42	32,217.74	1,620	-----	146,740.00	223,643.90	-----
Nebraska-----	945,543.90	471,945.16	473,598.74	67,417.76	198,975.81	127,167.02	26,982.76	49,781.81	1,620	-----	242,411.20	231,187.54	-----
Nevada-----	227,337.83	108,280.51	119,057.32	14,795.47	25,698.11	34,048.66	20,583.19	11,955.08	-----	1,200	45,412.32	73,645.00	-----
New Hampshire-----	312,915.62	115,798.01	197,117.61	24,918.64	45,320.00	20,990.53	21,814.30	1,134.54	1,620	-----	128,530.50	68,587.11	-----
New Jersey-----	720,851.88	209,163.88	511,688.00	64,818.34	71,390.79	36,514.51	26,666.64	8,153.60	1,620	-----	225,213.00	286,475.00	-----
New Mexico-----	541,451.55	233,141.80	308,309.75	35,455.41	84,068.40	90,522.28	23,095.71	-----	-----	-----	207,809.75	95,000.00	5,500.00
New York-----	2,866,899.50	687,910.20	2,178,989.30	175,677.81	282,400.98	186,442.80	40,148.61	-----	1,620	1,620	929,936.30	1,077,451.00	171,602.00



North Carolina-----	2,836,329.64	1,279,980.64	1,556,349.00	196,032.50	616,134.72	423,569.41	42,624.01	-----	1,620	-----	820,631.00	735,718.00	-----
North Dakota-----	648,787.16	372,807.66	275,979.50	46,527.70	137,807.12	123,705.06	24,442.25	38,705.53	1,620	-----	74,717.50	201,262.00	-----
Ohio-----	1,664,126.71	904,899.71	759,227.00	174,344.00	411,078.06	277,871.25	39,986.40	-----	1,620	-----	419,511.00	333,941.00	5,775.00
Oklahoma-----	1,504,989.36	791,702.59	713,286.77	114,335.77	354,232.35	237,480.88	32,688.61	51,344.98	-----	1,620	428,951.00	284,335.77	-----
Oregon-----	1,099,871.18	286,441.18	813,430.00	49,965.31	112,951.25	97,044.31	24,860.31	-----	1,620	-----	577,136.00	236,294.00	-----
Pennsylvania-----	1,590,030.47	879,901.58	710,128.89	247,302.93	348,623.69	233,495.78	48,859.18	-----	1,620	-----	580,128.89	130,000.00	-----
Rhode Island-----	122,208.21	65,452.21	56,756.00	14,294.63	26,217.56	4,417.74	20,522.28	-----	-----	-----	40,000.00	13,400.00	3,356.00
South Carolina-----	1,327,168.10	733,995.61	593,172.49	112,682.90	349,274.61	233,958.28	32,487.60	2,352.22	1,620	1,620	532,800.00	54,172.49	6,200.00
South Dakota-----	604,714.43	374,249.13	230,465.30	44,727.29	130,397.99	113,440.68	24,223.30	59,839.87	-----	1,620	215,454.03	15,001.27	-----
Tennessee-----	1,588,809.96	987,147.56	601,662.40	145,266.42	478,227.94	325,583.01	36,450.19	-----	1,620	-----	375,000.00	220,852.40	5,810.00
Texas-----	3,042,009.86	1,742,278.82	1,299,731.04	260,920.43	795,775.47	551,208.89	50,515.24	82,238.79	1,620	-----	464,214.68	824,228.36	11,288.00
Utah-----	437,648.43	188,843.43	248,805.00	27,534.10	57,596.34	66,713.19	22,132.38	13,607.42	1,260	-----	177,000.00	71,805.00	-----
Vermont-----	319,410.43	153,492.43	165,918.00	26,902.05	58,269.54	39,191.52	22,055.51	5,453.81	1,620	-----	100,000.00	65,918.00	-----
Virginia-----	1,594,533.01	798,607.34	795,925.67	134,126.66	374,361.83	251,783.41	35,095.44	-----	1,620	1,620	536,982.67	258,943.00	-----
Washington-----	978,222.13	356,195.46	622,026.67	68,315.60	142,282.78	116,885.13	27,091.95	-----	1,620	-----	323,722.99	298,303.68	-----
West Virginia-----	866,063.39	488,765.39	377,298.00	107,955.11	211,331.54	135,946.10	31,912.64	-----	1,620	1,620	260,878.00	103,400.00	13,020.00
Wisconsin-----	1,475,963.35	714,155.35	761,808.00	114,455.52	337,178.24	225,363.49	32,703.17	1,214.93	1,620	1,620	276,952.18	481,855.82	3,000.00
Wyoming-----	417,431.70	173,247.36	244,184.34	21,256.35	46,185.03	63,605.15	21,368.92	19,571.91	1,260	-----	146,510.34	97,674.00	-----
Alaska-----	48,950.00	23,950.00	25,000.00	13,950.00	-----	-----	10,000.00	-----	-----	-----	25,000.00	-----	-----
Hawaii-----	469,485.77	159,252.80	310,232.97	21,394.87	66,699.96	33,181.55	21,385.77	16,590.65	-----	-----	310,232.97	-----	-----
Puerto Rico-----	740,270.00	378,935.19	361,334.81	103,315.19	274,000.00	-----	-----	-----	1,620	-----	361,334.81	-----	-----
Unallotted-----	1,393.00	1,393.00	-----	-----	-----	1,150.00	-----	-----	243	-----	-----	-----	-----
Grand total-----	58,463,459.30	27,456,763.06	31,006,696.24	4,718,660.06	12,274,000.00	8,330,000.00	1,490,000.00	555,000.00	57,483	31,620	17,174,962.85	12,268,128.27	1,563,605.12

TABLE 6.—Number of cooperative extension workers added by 48 States and Hawaii during fiscal years July 1, 1945, to June 30, 1947. (This represents the net additions during the first 2 years that Bankhead-Flannagan funds were available, according to the records of the Washington office.) <sup>1</sup>

State	County agents (white)	Assistant county agents (white)	Negro county agents	County home demonstration agents (white)	Assistant county home demonstration agents (white)	Negro county home demonstration agents	County 4-H Club Agents		Assistant county 4-H Club agents	Super-visors (white)	Super-visors (Negro)	Subject-matter specialists	Total added
							White	Negro					
Alabama	---	40	1	---	-2	3	---	---	---	-1	2	-2	41
Arizona	1	4	---	---	---	---	---	---	---	1	---	-1	5
Arkansas	2	23	8	-1	7	8	---	---	---	---	2	3	52
California	5	47	---	7	13	---	---	---	---	1	---	5	78
Colorado	1	2	---	8	1	---	13	---	---	2	---	7	34
Connecticut	---	3	---	---	2	---	---	---	1	3	---	2	11
Delaware	---	2	---	---	---	1	-1	---	1	---	---	5	8
Florida	2	18	2	2	3	1	---	---	5	---	---	-1	32
Georgia	21	29	12	---	19	1	---	---	---	6	1	9	98
Idaho	6	---	---	5	---	---	12	---	---	2	---	3	28
Illinois	-1	-9	---	9	11	---	42	---	---	1	---	6	59
Indiana	---	23	---	11	2	---	2	---	---	-6	---	5	37
Iowa	4	---	---	-3	2	---	3	7	1	6	---	6	103
Kansas	8	5	---	11	9	---	6	---	---	3	---	3	45
Kentucky	6	29	1	15	3	---	---	---	---	2	---	---	63
Louisiana	---	24	4	1	12	11	---	---	---	1	---	---	53
Maine	---	1	---	---	2	---	4	---	---	-1	---	-1	5
Maryland	---	6	3	-2	5	---	---	---	---	1	---	3	16
Massachusetts	---	8	---	1	3	---	---	---	-2	---	---	2	12
Michigan	2	12	---	11	7	---	1	---	1	-1	---	11	64
Minnesota	1	5	---	12	1	---	15	---	16	2	---	1	66
Mississippi	---	7	11	1	12	---	28	---	---	2	2	2	55
Missouri	10	59	---	11	46	4	1	---	---	5	---	8	144
Montana	6	3	---	4	4	---	---	---	---	4	---	7	28
Nebraska	8	17	---	3	5	---	---	---	---	---	---	-1	32
Nevada	---	7	---	3	---	---	---	---	---	1	---	1	12
New Hampshire	---	5	---	1	---	---	---	---	-1	---	---	-4	1
New Jersey	---	4	---	-1	2	---	3	---	---	1	---	4	13
New Mexico	3	10	---	6	1	---	---	---	---	3	---	1	24
New York	---	28	---	4	1	---	6	---	8	2	---	2	51



North Carolina.....	65	9	4	39	24	---	---	---	---	2	3	8	154
North Dakota.....	5	---	6	1	---	---	---	---	---	2	---	-1	21
Ohio.....	26	---	12	---	---	-2	---	---	---	4	---	-3	42
Oklahoma.....	43	3	---	12	4	---	---	---	---	---	---	8	72
Oregon.....	14	---	9	3	---	4	---	---	1	2	---	10	45
Pennsylvania.....	17	---	3	16	---	---	---	---	---	2	---	3	41
Rhode Island.....	---	---	---	---	---	---	---	---	1	---	---	1	2
South Carolina.....	16	12	1	4	10	---	---	---	---	5	1	14	63
South Dakota.....	3	---	3	---	---	-2	---	---	-1	4	---	1	16
Tennessee.....	44	2	10	10	4	---	---	---	---	-2	---	1	70
Texas.....	38	-2	-5	4	3	---	---	---	---	4	---	7	59
Utah.....	2	---	16	2	---	---	---	---	---	2	---	2	27
Vermont.....	---	---	1	---	---	---	---	---	---	-1	---	---	0
Virginia.....	20	4	6	9	10	---	---	---	---	2	---	5	56
Washington.....	17	---	12	4	---	---	---	---	---	1	---	1	38
West Virginia.....	8	1	2	2	4	5	4	-1	---	1	1	2	32
Wisconsin.....	17	---	15	-1	---	16	---	---	---	3	---	8	63
Wyoming.....	9	---	6	2	---	---	---	---	---	---	---	6	25
Hawaii.....	7	---	-1	3	---	-1	---	---	---	5	---	3	17
Total.....	763	71	219	293	110	227	4	30	12	81	165	2,113	

<sup>1</sup> Alaska and Puerto Rico are not included, as they were not included in the Bankhead-Flannagan Act.

<sup>2</sup> Includes 11 part-time agents.

<sup>3</sup> Includes 55 part-time agents.

